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**Staff attitudes towards inmates and correctional work: An exploration
of the attitude - work outcome relationship**

**Linda Simourd
March 1997**

**A Ph.D. dissertation submitted to the department of Psychology, Carleton University in
partial fulfilment of the degree of Doctor of Philosophy.**

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The undersigned hereby recommend to
the Faculty of Graduate Studies and Research
acceptance of the thesis:

**"STAFF ATTITUDES TOWARDS INMATES AND CORRECTIONAL WORK:
AN EXPLORATION OF THE ATTITUDE-WORK OUTCOME
RELATIONSHIP"**

submitted by

Linda Simourd

in partial fulfillment of the requirements
for the degree of Doctor of Philosophy

Chair, Department of Psychology

Thesis Supervisor

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Carleton University
May, 1997

Abstract

Front-line correctional staff are a fundamental part of the correctional environment and offender rehabilitation process. Unfortunately, minimal consideration is generally given to their role when adjustments are made to the offender management process. As Jurik & Musheno (1986) found, this may result in unexpected and undesirable effects on the achievement of organizational goals. Research examining the relationship between staff attitudes and work outcomes within correctional environments is lacking and the present study sought to address this issue.

The present research explored the relationship between a variety of staff correctional attitude measures and staff work outcome variables. Participants consisted of 477 front-line staff in a large federal Canadian correctional organization that publicly endorses a rehabilitative approach to offender management.

Results indicated that, on average, front-line staff were supportive of correctional attitudes reflecting constructs such as rehabilitation and human service, and were unsupportive of measures reflecting punitiveness or custodial approaches. One exception was that the majority of staff were concerned with the potential for staff corruption/manipulation by increased interaction with inmates.

Correlational analyses indicated that the correctional attitude scales were significantly associated with most work outcomes (i.e., Growth Satisfaction, Organizational Commitment, General Satisfaction, Work Stress, and Citizenship). More modest correlations were obtained with Job Performance, and weak correlations were obtained with Intention to Turnover. The direction of these associations was consistent

with expectations for an organization that promotes a humane and rehabilitative approach to offender management.

Canonical analysis (CA), the most general case of the general linear model, was used to examine the nature of the relationship between the two variable sets. Results from a series of CA's predominantly found one significant canonical correlation that included all attitude variables and all staff work outcome variables except Intention to Turnover. Major contributors were the Attitudes Towards Corrections and Rehabilitation scales on the correctional attitude side of the equation, and Organizational Commitment and Growth Satisfaction on the work outcome side. Cross-validation indicated stability of these findings.

Results were discussed in terms of their practical, empirical, and theoretical implications. Most notably, this research yielded important implications for the selection and management of correctional staff, and provided additional support for a rehabilitative approach to offender management.

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There are many people I would like to thank in relation to this project and my academic experience in general. First, I want to thank my supervisor and good friend Dr. Dave Robinson. Your guidance throughout the project and availability for “just one question” were definitely valued. Also your sense of the importance of other larger life issues was greatly appreciated.

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and Western dancing is pretty impressive too!) And Don, from you I have learned that “pushing back the frontiers of science” although sometimes necessary, is not always popular. Thanks also for the meta-analysis addiction; I will never read or write a journal article quite the same again!

To my close friends - Ellen, Sandy, Louise, and Lynn, I appreciate your patience and good humour regarding my periodic neglect of our relationship during my studies. I think a road trip is in order. “Liz”, maybe one glass of wine, and a photo shoot await your arrival.

My parents have stood by me throughout my academic life beginning in that terrifying year of kindergarten. Your interest in my work and quiet support over the years has been appreciated. Thanks also for your education about the importance of family and the kinder - gentler approach to human interaction. Even from this project, your influence is apparent. More recently, gratitude is also expressed for your day care and housekeeping during the final phase of this project. Our house and yard never looked so good! I can never repay you for the great care you provided Melanie and undoubtedly the project would have dragged on without your assistance. Finally, sorry Mom, but your “baby” is now finished school; ah, but you still look so young!

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noted, I just wish one of you would have warned me that this ‘higher learning’ stuff could go on, and on, and on, and on, and ... Perhaps now that I am finished school, I can work on my golf game to ensure that I am not the Elvis Open Champion again! Ooh, I’m all shook up!

To Anne and all the ‘other side’ of the family including Janet, Tim, and Donna, thanks for your emotional support. You can now ask, one last time, - are you finished yet?

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Dedication

Students have often likened their dissertation to a baby and the completion of their project as the ‘delivery’ of that baby. In the process of creating this paper ‘baby’ I was fortunate to have given birth to my first child. I would like to dedicate this project to her. Melanie, you have provided great impetus for completing this project as I love spending time with you and watching you grow. You bring me great joy and make me realize on a daily basis what life is all about. I hope that your curiosity about life and enthusiasm for mastery remain with you throughout life. May you find enjoyment in a lifetime of learning.

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STAFF ATTITUDES TOWARDS INMATES AND CORRECTIONAL WORK: AN EXPLORATION OF THE ATTITUDE - WORK OUTCOME RELATIONSHIP

In recent years, organizations have gained a renewed interest in the importance of staff. 'Staff are our greatest resource' has become a common catch phrase of the nineties. Service based industries are exceptionally cognisant of the role employees play in customer satisfaction, with the attitude they project of particular importance. It is now being suggested, at least within the service sector, that companies traditionally hiring for skill and training for attitude consider the opposite - hiring for attitude and training for skill (Heskett, Sasser, & Hart, 1990). The rationale is that it is easier to provide staff with the necessary job skills, than teach a service orientation.

The field of Corrections can be thought of as a social service industry (Whitehead & Lindquist, 1986) with both offenders and society as clients (Correctional Service of Canada, 1991). Client services are aimed at altering inmate intermediate and long term outcomes such as social adjustment, increased prosocial skills, absence of antisocial behaviour, as well as increased societal safety. Within this profession, the value of staff has been extensively hypothesized and, to a lesser degree, researched. As Cullen and his colleagues state: "... the fabric of life within the correctional system is shaped ultimately, and daily, by the system's employees." (Cullen, Lutze, Link & Wolfe, 1989, p.33). The attitudes of front-line staff are believed to impact on offender-staff interactions and ultimately offender outcomes (Glaser, 1964; Gould, 1974; Johnson & Price, 1981; Poole & Regoli, 1980).

Despite recognition of the critical role front-line staff play in influencing the lives of offenders, selection of correctional officers has involved limited requirements and unstandardized selection methods (Hawkins, 1976; Wahler & Gendreau, 1985).

Correctional educators suggest more emphasis be placed on evaluating prospective guard staff's attitudes towards inmates (Plecas & Maxim, 1991; Shamir & Drory, 1981). Some advocates extend this belief to a point, similar to the service sector, where attitude is viewed as more important than technical proficiency (Hawkins, 1976).

Consistent with this human service notion, Hoge & Andrews (1986) propose a theoretically and empirically based model for social service intervention. The model, designed specifically for treatment settings, identifies seven sets of factors relevant to social service intervention outcomes (see Appendix A). It suggests that setting, client, worker, program, and process factors impact on intermediate and long-term client outcomes. These factors affect outcomes directly, and/or indirectly via interactions with other factors in the model.

One set of factors of particular interest are 'worker factors'. These consist of characteristics the counsellor brings to the therapeutic situation including: training and experience, relationship skills, and treatment orientation. Inherent in this set of factors are the therapist's attitudes about the efficacy of treatment, the client population, basic notions of helping others etc..

Although the model focuses on the therapeutic process of formal treatment, the model could be expanded to include a wider range of change agents in less formal treatment settings. It has been hypothesized that individuals less central to 'treatment' can

impact on client outcomes (Johnson & Price 1981; Rappaport, 1977; Wahler & Gendreau, 1985). In medical treatment, for example, in addition to the physician, other front-line staff (e.g., nurses, aides, volunteers) contribute toward patient outcomes. Within this expanded model, worker factors would pertain to a broader range of 'workers' and their characteristics/attitudes could impact on the client, the program, and ultimately patient outcomes.

This expanded view of worker factors is consistent with empirical evidence within the correctional field. That literature has shown that the correctional orientation (i.e., attitudes) of front-line staff impacts on offender outcomes. Evidence suggests the presence of human service or rehabilitation oriented front-line staff is associated with intermediate outcomes such as: decreased institutional violence and instability (Gunn & Robertson, 1982; Rice & Harris, 1993), increased social adjustment (Gunn & Robertson, 1982), increased inmate morale (Rice & Harris, 1993), increased inmate co-operation (Paulhus, 1973), and increased institutional work performance (Gillis, 1994). Conversely, increased authoritarianism has been associated with increased institutional instability (Glaser, 1964). Long-term inmate change (i.e., lower recidivism) has also been linked to a professional orientation of front-line staff. Glaser (1964), for example, found that 50% of offenders not returning to prison reported that a staff member was influential in their desistance (Glaser, 1964). The salient characteristics of these staff were frankness, fairness, and a sincere interest in the inmate that often exceeded the basic requirements of the job (Glaser, 1964). Similarly, Andrews and Kiessling (1980) found that citizen volunteers with minimal training had as significant an effect on probationers' attitudes and

recidivism rates as professional probation officers. Key characteristics for either supervisory group was ascribing to social convention (e.g., modelling and reinforcing prosocial attitudes/behaviour) and interpersonal sensitivity.

Given this minimal but compelling research, recruitment and retention of front-line staff with positive correctional attitudes would be desirable for correctional organizations. Primarily for political reasons, American corrections in the 1970s and 1980s attempted to achieve this goal (Jurik & Musheno, 1986). Unfortunately, their efforts to professionalize guard staff were fraught with difficulties. Initiatives that encouraged the hiring of ethnic minorities and better educated staff as a means of professionalization were later found to have little or no effect on attitudes towards inmates (Jacobs & Kraft, 1978; Jurik & Musheno, 1986). Using education as the cornerstone of professionalization also yielded the unexpected effect of increased staff dissatisfaction, as work related expectations (e.g., promotional opportunities) of this educated group were unmet (Jurik, Halemba, Musheno, & Boyle, 1987).

Lessons learned from American initiatives suggest that if the goal is recruitment of human service oriented staff, then attitudes indicative of that interaction style should be measured directly. Moreover, it is essential to consider work outcomes associated with this type of organizational manipulation. The costs and benefits to an organization and its personnel are issues deserving more attention. These issues are particularly relevant to the Correctional Service of Canada which promotes as its major philosophy a rehabilitative orientation.

The present study was designed to examine these issues in a large sample of Correctional Service of Canada (C.S.C.) front-line staff. The Correctional Service of Canada, responsible for criminals serving sentences of 2 years or more, declares in its Mission Statement that "our strength and our major resource in achieving our objectives is our staff and that human relationships are the cornerstone of our endeavour" (Correctional Service of Canada, 1991, p. 4). Another major tenet is a commitment to effective rehabilitation, and humane control based on positive interaction between staff and offenders (Correctional Service of Canada, 1991). These statements reflect the importance of staff attitudes to the business of offender management and rehabilitation in Canada.

Two basic questions were addressed by this research. First, what is the level of support for specific correctional attitudes among front-line staff? Second, are correctional attitudes associated with job related outcomes? Are helping oriented staff, for example, better job performers, are they more satisfied with their job, or more committed to the organization? What drawbacks exist; are they more at risk for job stress, or job turnover?

This study was expected to have empirical, and practical implications. Empirically, this research provided a unique opportunity to examine a number of correctional attitude measures in one sample. The overlap and distinctiveness of the measures was assessed, and, they were also examined as a set of attitude measures.

Second, the correctional literature has focused on the prediction of attitudes from demographic variables, while largely leaving it's relationship with staff outcome variables untested. The current project filled this gap in the literature by examining the relationship

between correctional attitudes and certain work outcome measures that have rarely been systematically examined in the correctional literature. Commitment to the organization, job performance, citizenship behaviour, job satisfaction, stress, and turnover intentions were the work outcome variables of interest.

Third, this study was expected to contribute to the extant literature by expanding the scope of staff considered. Research on correctional staff has primarily focused on guards, while other front-line staff have been less frequently studied (Ben-David, 1992; Fry, 1989). This research broadened the scope to include staff with daily inmate contact (e.g., case managers, shop instructors, teachers, maintenance and food service staff).

In practical terms, the project had implications for organizational policy, as well as staff selection. First, it informed management of the level of consistency between certain organizational goals and employee attitudes. Given that, in principle this organization has ascribed to a human service or rehabilitative approach, it was important to evaluate the extent to which employees share such views. Second, exploration of the magnitude and direction of association between correctional attitudes and specific outcome measures had implications for operational issues, the recruitment and selection process, and staff training.

Overall, the present research was expected to have a wide range of implications, and fill an obvious gap in the correctional literature. These questions are topical in Canada as the current tide within federal corrections pushes for professionalization of its staff (Correctional Service of Canada, 1991).

Organizational Context

Prior to a discussion of the correctional literature, the role of organizational context is briefly examined. Here, context is defined as the fundamental precepts, principles, or goals of an organization. As Hepburn & Albonetti (1980) point out, most correctional organizations have both custody and treatment goals. The major distinction is the degree to which one of these goals is the primary priority. C.S.C. has clearly stated its major priority is rehabilitation. This organizational context was expected to influence the present study's results in terms of the level of support for certain correctional attitudes and the direction of association with various work outcomes.

Argyris (1964) states that the character of an organization is defined by its goals. Further, organizational survival and success have been hypothesized to be dependent upon a sound set of beliefs. Beliefs are viewed as vital because they serve as the platform on which organizational policies and actions are based (Watson, 1963). Moreover, the critical factor for organizational success is employee belief in and adherence to the organization's basic principles (Watson, 1963).

Within corrections, Cressey (1958) found that an organization's primary goal/principle influenced policies, structure, and job design. More specifically, he examined two correctional facilities with different primary organizational goals. In one institution, custody or society's protection was emphasized, while the other emphasized treatment goals. Policy was influenced, for example, by differing approaches to visitor requests. In the custodial institution, 1000 'curious' community visitors toured the institution during a one month period. In contrast, the treatment institution subtly

discouraged such visitors with the exception of academic and correctional groups. These differing organizational contexts also influenced the frequency and nature of staff-inmate interactions. Within the custodial setting, strict guidelines dictated high social distance between guards and inmates; staff deviating from these rules were subject to disciplinary action from superiors. In the treatment institution, more spontaneous and collegial interaction with inmates was permitted and encouraged. Unfortunately given the discretionary powers of staff within this latter setting, individuals not ascribing to the treatment model were able to ridicule or verbally abuse inmates with less probability of detection (Cressey, 1958).

This literature suggests the interaction between employee attitudes and the organization's philosophy is critical to organizational functioning and work outcomes. One theory that considers this interplay between the individual and the organization is Person-Environment-Fit (P-E Fit). Many have advocated the use of the P-E Fit perspective when examining attitudes and behaviours of individuals within organizations (Vancouver & Schmitt, 1991). Coulton (1981) defines P-E Fit as "the degree of congruence or correspondence between and individual's needs, capabilities, and aspirations and the resources, demands, and opportunities characteristic of the environment" (p. 26). Within a correctional setting this certainly encompasses the fit between an individual's attitudes about offenders/offender management, and the organization's major priority for offender management.

One P-E Fit based theory is Holland's (1973) theory of vocational choices which proposes that people seek environments that will enable them to exercise their skills and

abilities, their attitudes and values, and allow them to take on roles consistent with such desires/beliefs. In accordance with the theory, a system of matching an individual's predominant personality type (e.g., realistic, investigative) with work environments (e.g., realistic, investigative) has been formulated.

Degree of fit is also linked to individual and organizational outcomes. Holland's (1973) person - environment pairings, for example, have implications for vocational stability and achievement, educational success, personal competence, and social behaviour. Vroom (1960) noted an association between consistency of individual and organizational goals with positiveness towards the organization. Within the field of social work, P-E Fit has been associated with physical and mental health outcomes in the elderly such as: mortality, health, well-being, and satisfaction (Coulton, 1981).

Within corrections, Mayes and Ganster (1988) examined P-E Fit and its relationship to work outcome variables in a sample of 73 correctional staff (e.g., professionals administrators, support staff). P-E Fit was defined as a match between the individual's need for Achievement and Power and the organization's demands in these domains (i.e., the organization's structure and mission offered high need Achievement, but low Power). Results indicate these P-E Fit variables were strong predictors of job satisfaction, but they did not predict organizational commitment (Mayes & Ganster, 1988).

In other correctional work, Toch (1977) and Wright (1985) developed scales assessing P-E Fit of inmates to correctional environments that are potentially useful for reducing inmate adjustment problems and deterioration of inmate life skills (Toch, 1977;

Wright, 1986). The United States Bureau of Prisons integrated some of these principles in the design and operation of new correctional facilities (Wener & Olson, 1980). Architects were informed of the overriding goals of these centres (inmate protection, care, decency, and treatment), and in turn, they integrated this information into the design of functional unit-based facilities with private rooms and fewer symbols of incarceration (e.g., a lack of iron bars, no separate inmate/guard areas). Results indicated lower levels of vandalism and graffiti, and subjective impressions of less inmate stress and emotional outbursts. Although staff were also interviewed and observed with respect to the influence of environment on their behaviour, the report focused primarily on inmate perceptions and behaviour. Accordingly, the overall effect on staff remains unclear.

Houston, Gibbons, & Jones (1988) conducted research in a naturally occurring experiment involving the closure of a fortress-like 1947 institution and the opening of a new correctional facility that incorporated design changes similar to those described by Wener & Olson (1980). No change in inmate attitudes was observed across settings using the Moos Correctional Environment Scale. Further, only limited changes were observed in staff attitudes when taking into account attitude change in two control group prisons. The unique changes were that female staff perceived the new facility to encourage inmates to be more concerned with personal issues (personal problem orientation) and to take more initiative in planning activities and assuming unit leadership (autonomy). Overall these results were not as supportive of the person-environment link as the Wener & Olson (1980) findings.

It should be emphasized that the current study is not a test of P-E Fit in a correctional setting. However, based on previous literature in other domains, and limited correctional research, it appears that organizational context (i.e., general philosophy/primary goal) plays an important role in personal and work environments. For the present study this suggests that, in work settings, the interaction between an individual's beliefs and the organization's beliefs would likely influence the direction of association with certain organizational/work outcomes. In an organization emphasizing rehabilitative ideals, for example, it would be expected that work stress would be negatively associated with rehabilitative views in that there would be congruence between the individual's and organization's beliefs. Again using notions of P-E Fit and goal congruence, in an organization emphasizing a custodial orientation, work stress would likely be positively associated with rehabilitative views as the individual's beliefs would be incongruous to the organization. Emergence of evidence counter to this pattern, as discussed earlier, would be of great practical significance to an organization as it questions their implementation of stated precepts.

Correctional Attitudes Defined

The empirical correctional literature has defined 'correctional orientation' as attitudes towards inmates and towards interactions with inmates (Whitehead & Lindquist, 1989). Broadly, this includes attitudes towards: rehabilitation, punishment, contact with inmates, and helping others. Various operational definitions and measures have been used to examine correctional attitudes.

Cullen, et al., (1989) have examined correctional orientation through the measurement of attitudes supportive of rehabilitation, and supportive of custody. Their interest stems from a recognition that although recent American policy reform has focused on the 'get tough' approach, correctional officers - individuals that deal with inmates daily - believe the purpose of imprisonment involves both punishment and rehabilitation.

Toch and Klofas (1982) approach the issue of professional orientation from a job enrichment perspective. They view the role of the correctional officer as ripe for enrichment in the treatment or human service area. They examine staff attitudes towards a readiness for such enrichment by tapping interest in counselling, social distance, concern with corruption, and punitiveness within the correctional officer role (Toch & Klofas, 1982).

Johnson and Price (1981) conceptualize correctional orientation using the notion of human service. They suggest the 'complete correctional officer' holds a human service orientation which entails roles such as informal counsellor, referral agent, peacekeeper, ombudsman, and friend (Johnson & Price, 1981).

These definitions demonstrate that correctional orientation has been considered in a variety of ways. Some may overlap (e.g., Cullen and Klofas), while others appear distinct (e.g., Johnson & Price). What they share is a focus on staff attitudes towards inmates and the job of offender management. Whether one conceptualization represents the best view of correctional attitudes remains unknown. To date, no data exists which compares these constructs in the same sample. Perhaps the diversity of approaches may enrich our understanding of correctional orientations.

Level of Attitudes

The largest segment of research on correctional staff attitudes has been devoted to assessing attitudes of correctional officers. The prototypic view of officers as 'hacks' or 'screws' has led to the publication of many articles and books. Hollywood's portrayal of the nasty, vindictive officer, however, does not withstand scientific scrutiny. Even the popular notion of a 'guard subculture' has been challenged (Klofas & Toch, 1982; Lombardo, 1985; Philliber, 1987).

Researchers find that correctional officers are not overwhelmingly negative or uniform in their views of inmates and offender management (Jacobs, 1978; Lombardo, 1985; Peretti & Hooker, 1976; Philliber, 1987; Poole & Pogrebin, 1988). Interviews with 32 prison guards in the Indiana State Prison, for example, found only 6% reported the custodial or keeper theme as their main role (Peretti & Hooker, 1976). Thirty-one percent perceived their role to be primarily a position of authority with a human relations approach. The second most frequently stated role was social distance, that is one of personal association but not friendship (28%).

When asked to state the main reason for offender imprisonment, 929 Illinois correctional officers showed varied responses (Jacobs, 1978). Forty-six percent cited rehabilitation as the primary purpose of imprisonment, 28% the protection of society, 26% punishment, and 14% deterrence from future crime (Jacobs, 1978). Eleven years later, Cullen, et al., (1989) posed the same question to 250 officers in a southern USA prison. In that sample, only 10% felt imprisonment was primarily aimed at rehabilitation, 25% stated it was for the protection of society, 24% for punishment, and 29% as deterrence.

Toch and Klofas (1982) administered questionnaires to 714 correctional officers in four American maximum security prisons. Twenty percent expressed a low interest in a human service orientation, 57% a moderate interest, and 23% a high interest.

Teske and Williamson (1979) surveyed 235 correctional officers about their attitudes towards a variety of treatment programs (e.g., psychological, educational, vocational) offered at their institution. Overall, staff held positive attitudes towards the treatment programs, but scores ranged from very negative to very positive.

Few studies have expanded their scope to include groups other than correctional officers. One exception (Ben-David, 1992), used a broad range of front-line staff including: guards, therapists, nurses, secretaries, student interns, and social workers. Observation and survey methods found five distinct types of attitudes towards staff-inmate interactions with each type distributed almost equally across the sample. The types were: punitive (authoritative), custodial (task oriented), patron (guidance & co-operation), therapist (professional staff-patient relationship), and integrative (flexible based on the individual and situation). Inspection by occupation indicated that, with the exception of nurses, no single relational type was predominantly used by a particular occupational group.¹

In other research (Ortet-Fabregat & Perez, 1992), attitudes towards offender treatment were examined using five subject groups: 1) rehabilitation group (psychologists, criminologists, teachers, social workers), 2) penal justice group (prosecutors, judges,

¹ Among nursing staff, 60% were labeled the Punitive type, 20% were the Patron type, and 20% were Integrative.

lawyers), 3) correctional officers, 4) law enforcement officers (local & state police), and 5) second year university students. As hypothesized, the rehabilitation group held the highest pro-treatment/pro-assistance views, followed closely by the penal justice group.

Correctional officers were the least supportive of such views, along with police officers.

It should be noted, however, that on average these latter groups still fell on the treatment/assistance end of the continuum rather than the punishment end.

Finally, there are limited data on C.S.C. staff attitudes towards inmates. Plecas and Maxim (1991) found a number of new recruits held attitudes that were counter to the organization's basic philosophy. Approximately 34% of recruits felt that at least half of the inmates were not capable of rehabilitation, and 19% rated inmates as not deserving of any civil rights². The authors of that report questioned whether recruiters considered the C.S.C. Mission statement when hiring these staff. Gillis (1994) while assessing leadership styles of 27 shop instructors, measured their correctional attitudes. Sixty-six percent of the instructors held rehabilitative attitudes, while 34% held punitive attitudes. Last, Loza (1993) conducted a study of C.S.C. staff attributions of blame and amenability to treatment of rapists. Subjects included correctional officers, psychologists, and case management officers from a federal prison which housed sexual offenders, as well as community based social workers who assisted with institution to community transitions. Results indicated that correctional officers believed significantly less in the possibility of

² These percentages are estimates as the original report presented these data as a breakdown by 'stayers' (N=295) and 'leavers' (N=232). For the first question the actual data were 35% stayers and 33% leavers; for the second question 21% stayers and 17% leavers.

rehabilitating rapists than other staff groups (Loza, 1993). Inspection of group means, however, indicated the correctional officer group showed at least moderate support for the rehabilitation and treatment of rapists. It is also noteworthy that scores for this group demonstrated a large range indicating a diversity of opinion³

Together these studies suggest that correctional officers are not homogenous with respect to their views of inmates and offender management. Moreover, they indicate that some guards endorse positive attitudes towards inmates and view correctional work as a helping profession. Research with other front-line staff also indicate a diversity of opinion. Data on C.S.C. staff overall indicate more positive correctional attitudes.

Based on the extant research, it was hypothesized that C.S.C. front-line staff would endorse positive/favourable⁴ correctional attitudes (e.g., rehabilitation, human service orientation) more strongly than negative/unfavourable correctional attitudes (e.g., custody, punitive). Further, across front-line staff there would be some variability across occupational groups. Professionals, Case Management, and Correctional Supervisors

³ Dr. Loza granted the present author access to the original data. Group means were calculated by the present author; they are not reported in Loza (1993). The range for the correctional officer group was 4 - 22 with 4 being the lowest possible score and 24 the highest possible score. For other institutional staff and community staff, the ranges were 11 - 24 and 14 - 22 respectively.

⁴ The labels 'favourable' and 'unfavourable' attitudes were used in this paper rather than the terms 'positive' and 'negative' attitudes. This avoided confusion with any discussion on the direction of association between 2 variables (i.e., positive association; negative association). The chosen labels were consistent with that which would be hypothesized within this organizational context. That is, management would view Rehabilitation or Human Service attitudes as favourable correctional attitudes and Custody or Social Distance as unfavourable correctional attitudes.

were expected to be more supportive of favourable correctional attitudes than Correctional Officers or line staff.

Prediction of correctional attitudes

The second largest segment of correctional attitude research has involved the prediction of attitudes and examination of simple bivariate associations with demographic variables. In a narrative review of the literature, Philliber (1987) separated common variables of interest into two sets: individual characteristics, and organizational conditions. Frequently examined individual characteristics include: age, years of service, gender, education, and race. Organizational level variables include: rank, degree of inmate contact, level of institutional security, and work shift. A detailed review of each of these variables is available in Appendix B, however, regression analyses which examine the combined ability of these variables to predict correctional attitudes is more germane to this discussion. Four such regression studies are reviewed.

Jurik and colleagues produced a series of research reports on 179 correctional officers within the Western Department of Corrections (WDOC); two reports employed regression techniques to the prediction of correctional attitudes (Jurik, 1985; Jurik & Musheno, 1986). Jurik and Musheno (1986) predicted social distance (i.e., preference for less personal contact with inmates) using four individual characteristics and two organizational conditions. The significant predictors of social distance were lower education, and less frequent inmate contact. Non-significant variables included: race,

gender, age, and years of service. The total proportion of variance explained was significant ($R^2 = .18$, $p < .05$).

Using nine independent variables, Jurik (1985) explained 13% of the variance in attitudes toward inmates. Individual level factors of significance were: minority status, age, initial human service interest in the job, and initial security interest in the job. Fewer years of service and assignment to a minimum security institution were the organizational factors associated with more favourable perceptions of inmates. Gender, education, and frequency of inmate contact did not uniquely contribute to the prediction equation. After a comparison of the relative contribution of individual and organizational level effects, Jurik (1985) concluded their effects were of equal importance.

Cullen, et al., (1989) included 12 variables in regression equations for predicting support for custody, and support for rehabilitation. Role problems (role conflict/ambiguity) and night shift significantly contributed to the explanation of custody orientation, while supervisory support, dangerousness, security level of setting, work stress, day shift, years of experience, age of entry, gender, race, and education were non-significant. The proportion of variance in custody orientation explained by this variable set was 15%. The second regression analysis found night shift (negative association), age of entry, and race (black) significantly predicted rehabilitation orientation. The variance explained for this equation was 17% (Cullen, et al., 1989).

The final regression study to be discussed was conducted by Whitehead and Lindquist (1989). Separate regression equations were used to predict four aspects of correctional attitudes: social distance, support for counselling roles, punitive orientation,

and concern with corruption of authority. Independent variables included in the equation were: education, race, seniority, age at entry, day shift, night shift, security status, job satisfaction, job stress, participation in decision making, and role conflict. For social distance, the adjusted R-square was .10 with blacks and older entrants preferring less social distance. Race also significantly contributed to the explanation of punitive orientation with blacks showing less preference for this type of approach (adjusted $R^2 = .04$). For the prediction of counselling roles and concern with corruption of authority, none of the individual or organizational variables uniquely contributed to the explanation of either dependent variable. The adjusted R-squares were .00 and .01 for counselling and corruption respectively (Whitehead & Lindquist, 1989).

Two salient points emerge from this line of research. First, is the poor to moderate ability of these variables to predict correctional attitudes (i.e., variance explained ranged from 0% to 18%). These regression results are consistent with studies exploring the simple bivariate association (see Appendix B). One conclusion to be drawn is that the ability to predict attitudes from demographic or organizational variables is limited. Accordingly, recruitment and/or organizational policy change based on these predictor variables is not expected to dramatically effect the correctional attitudes of front-line staff. Perhaps more direct assessment of attitudes would be the best measure of prospective employees' orientation.

The second salient finding of this regression research is the variation in significant predictors across attitudinal measures. For instance, education and degree of inmate contact were relevant to social distance but not to attitudes towards inmates (Jurik 1985;

Jurik & Musheno, 1986). Previous research has concluded that it may be inaccurate to treat correctional orientation as a dichotomous construct (Jurik & Musheno, 1986; Lombardo, 1982; Hepburn, 1984), and the current review supports that perspective. A multi-dimensional approach would bring several definitions into a single examination, thus providing an opportunity to examine specific correctional attitudes individually and also in combination as a set of beliefs. It is perhaps the complex combination of these attitudes which influences organizational outcomes.

Organizational/Work Outcomes

The association between correctional attitudes and work outcomes has been less frequently examined in the empirical literature. Of particular interest to the current research were: job satisfaction, job stress, organizational commitment, job performance, citizenship behaviours, and intention to turnover.

Data on the association between correctional attitudes and job satisfaction were found in three studies reporting a total of eight correlations. Jurik and colleagues (Jurik & Musheno, 1986; Jurik & Winn, 1987) assessed punitive attitudes, positive attitudes towards inmates, and preference for social distance in relation to general job satisfaction. Correlations for the first two measures were statistically significant ($r = -.24$, $r = .28$ respectively), whereas a value of .06 was obtained for social distance (Jurik & Musheno, 1986; Jurik & Winn, 1987). Shamir and Drory (1981) reported two non-significant findings, one between general job satisfaction and views on the rehabilitation potential of prisoners ($r = .07$), the other using the same satisfaction measure and the supportive role

of the guard ($r = .01$). Similarly, Hepburn (1984) found job satisfaction was not associated with a punishment orientation ($r = -.09$), custody orientation ($r = -.08$), or social distance ($r = -.04$). The average correlation⁵ across studies was $r = .09$ with a range of .28 to $-.06$.⁶ Jurik et al (1987) used regression techniques to predict job satisfaction from a variety of demographic and attitudinal measures. They found that positive attitudes towards inmates was a significant predictor of job satisfaction (Jurik, Halemba, et al., 1987). Overall, the varied findings across studies indicates additional research is required to understand the relationship between correctional attitudes and job satisfaction.

Theoretical arguments also support the need for further consideration of the correctional attitude - job satisfaction association. Within the correctional literature there has been extensive discussion about the merits of enriching the correctional officer job via an increased human service role (Hepburn & Albonetti, 1980; Johnson & Price, 1981; Klofas, 1984; Whitehead & Lindquist, 1989). Evidence from the general literature on job

⁵ All average correlations (effect size estimates) computed in this paper were performed using procedures from Rosenthal (1984) and Wolf (1986). They represent the unweighted average correlations. Rosenthal (1996) encourages the use of meta-analytic techniques in summarizing research across studies, regardless of the number of effect size estimates available.

⁶ This average correlation was based on 8 correlations. To compute the average, the direction of association for all correlations were converted to reflect more positive attitudes and greater job satisfaction. In so doing, only one correlation was counter to the hypothesized direction. Jurik and Musheno (1986) found preference for greater social distance (i.e., they prefer inmates not share problems with them) was associated with greater job satisfaction. Thus, in calculating the average, this r-value was converted to $-.06$.

enrichment, as well as that specific to corrections, suggests that job enrichment is associated with higher levels of general job satisfaction (Brief, Munro & Aldag, 1976; Hackman & Oldham, 1980; Lindquist & Whitehead, 1986). Additional research is needed to clarify whether job enrichment, in the form of a professional orientation, enhances job satisfaction. Following recommendations by Jurik et al. (1987), the current project examined a variety of professional/correctional orientation indices in relation to job satisfaction.

In summary, on the basis of research it was hypothesized that favourable correctional attitudes would show a weak positive association with general job satisfaction. Unfavourable correctional attitudes would show a weak negative correlation with general job satisfaction. Some variation in the magnitude of these relationships was expected across attitude scales given the pattern of results from the extant research.

The issue of stress in correctional work has been examined extensively through a variety of stress variables including: work stress, alienation, cynicism, role conflict, burnout, and dissatisfaction (Philliber, 1987; Whitehead & Lindquist, 1986). Some stress measures are perhaps more tailored to the correctional officer role than other correctional jobs (e.g., role conflict, cynicism). Further, empirical evidence suggests that predictors of stress can vary across specific types of stress (Cullen, Link, et al., 1985). Thus, separate examination of different types of stress (e.g., work stress, dissatisfaction, life stress) is recommended (Cullen, Link, et al., 1985).

Based on these issues, the stress variable for this research was required to be sufficiently broad in definition to have relevance to a range of job classifications, yet also

sufficiently differentiated from other stress variables. The variable meeting these requirements was 'work stress' which has been defined in the literature as anxiousness or pressure felt at work (Cullen, Lemming, Link, & Wozniak, 1985). Using a sample of C.S.C. staff, Karlinsky (n.d.) found work stress to be the most frequently cited job concern. As such, 'work stress' was of considerable interest to the proposed research.

Within the work stress literature, the person-environment fit model has received much attention (McMichael, 1978; MacBride, 1983). Consistent with the general P-E Fit perspective, the stress model proposes that stress is not inherent to a particular situation, rather it involves an interplay between the individual and his/her social or physical environment (McMichael, 1978). Further, an individual's reaction to work is influenced among other things, by his/her current attitudes (McMichael, 1978). Given that the organization under study promotes a rehabilitation/human service approach, it might be expected that individuals with attitudes consistent with those views would experience less work stress.

Unfortunately, little research has explored the relationship between correctional attitudes and work stress. Rutter and Fielding (1988) found job stress was associated with a custodial orientation ($r = .30$) in a sample of British correctional officers. Similarly, the strongest predictor of poor health in 575 New Zealand correctional staff was poor relations with inmates (Long, Shouksmith, Voges, & Roache, 1986). Cullen, Link, et al. (1985), however, found correctional orientation was not a significant predictor of work stress. Based on the extant correctional literature as well as rational arguments, it was

hypothesized that a favourable correctional orientation would be associated with less work stress in C.S.C. front-line staff⁷.

Within the organizational psychology literature, organizational commitment has become a major variable of study, exceeding job satisfaction in terms of research interest (Schneider, 1985). The organizational literature has generally viewed commitment from two perspectives: affective attachment to an organization (affective commitment - Porter), and costs associated with leaving an organization (continuance commitment - Becker's side-bet theory) (McGee & Ford, 1987, Williams & Hazer, 1986). The measure selected for this research, the Organizational Commitment Scale (Mowday, Steers, & Porter, 1979), taps the affective dimension. It has been the most popular measure of organizational commitment (McGee & Ford, 1987; Meyer, Allen, & Gellatly, 1990; Morrow, 1983; Fandal, Fedor, & Longenecker, 1990) and has been linked with number of work related variables. The affective perspective describes organizational commitment as the degree to which an individual identifies with his/her organization, its goals, and wishes to remain a member (Mowday, et al., 1979). Significant relationships have been noted between this type of organizational commitment and work related variables such as: job satisfaction, lower job turnover, less absenteeism, fewer stress symptoms, and job performance across a variety of occupational groups (Mottaz, 1988; Mowday et al., 1979;

⁷ Previous research has also found a significant association between less rehabilitative/ more punitive correctional attitudes and increased 'stress' using the following stress type variables: alienation (Poole & Regoli, 1981), role conflict (Hepburn & Albonetti, 1980; Shamir & Drory, 1981), role stress (Poole & Regoli, 1980), and cynicism (Ulmer, 1992; Walker, 1980). Within the current context, some of these types of stress could be considered sources of job stress.

Tett & Meyer, 1989; Wittig-Bergman & Lang, 1990). Given its definition and associated outcomes, affective organizational commitment may be valued by correctional organizations.

Antecedents of organizational commitment have been discussed within the context of person-environment fit. Using an exchange perspective, commitment is viewed to increase with greater perceived congruence between the individual's wants and the job rewards (Mottaz, 1988). Although not directly examined to date, correctional attitudes could fall under the definition of work values as wants and desires occur within the context of one's attitudes. Similarly, Schneider (1987) states that individuals are attracted to, selected by, and remain with an organization that has goals similar to their own.

Organizational research has found work rewards and values accounted for 61% of variance in organizational commitment (Mottaz, 1988). Consistency between an employee's goals and the organization's goals has also been associated with increased commitment in a large sample of school teachers ($r = .21$) (Vancouver & Schmitt, 1991). Meyer and Allen (1988) found that confirmation of pre-entry expectations was a strong predictor of organizational commitment at 6 months ($r = .52$) and 11 months ($r = .48$).

The only correctional research, albeit remotely related to this topic, found that rehabilitation oriented staff reportedly perceived corrections as a career rather than a temporary position (Teske & Williamson, 1979). Yet, the same study found that rehabilitation oriented staff were also more likely to have supplemental sources of income, which might suggest less commitment to the organization given other work interests.

Research is needed to investigate the association between correctional attitudes and organizational commitment. Based on the general organizational literature, it was hypothesized that favourable correctional attitudes would be associated with greater organizational commitment in C.S.C. staff, particularly given that the organization under study purportedly promotes/values a rehabilitative approach to offender management.

Job performance was another work outcome variable of interest in the current study. As discussed earlier, inherent in the focus on correctional attitudes lies the fundamental assumption that staff attitudes influence behaviour. In an applied sense, it is relevant to assess whether correctional attitudes are related to job performance. Are more rehabilitative oriented staff, for example, better performers?

The few studies that have empirically examined this issue indicate a significant association between correctional attitudes and job performance. Held, Levine, and Swartz (1979) found negative attitudes towards inmates were associated with job behaviour (i.e., more inmate charges laid). Similarly, Poole and Regoli (1980) found that among 144 correctional officers, a custodial orientation was associated with completion of more disciplinary reports. They contend that orientation influences perceptions and reactions to situations. Custody oriented staff, may impose greater social control over inmates thereby observing and reporting more inmate infractions (Poole & Regoli, 1980). These studies have focused exclusively on guard staff, this issue should also be examined with a broader range of front-line staff.

In this study, job performance was assessed more generally in the form of job behaviours that are applicable to a wide range of staff. Based on the minimal correctional

research, it was hypothesized that positive correctional attitudes would be associated with higher job performance in C.S.C. front-line staff.

A less frequently considered work outcome is citizenship behaviour. Nicknamed 'The Good Soldier Syndrome', citizenship behaviours represent performance that is not formally compensated for in the organization's reward system and exceeds the normal requirements of the job. Assisting co-workers on the job and exerting extra effort in times of crisis are examples of citizenship behaviours (Organ, 1988). These types of behaviours have been deemed essential to organizational functioning (Katz, 1964). In the aggregate these behaviours make the organization more effective, although the individual's motives for doing so may not be specific to the organization (Organ, 1988).

Research on this construct has revealed two dimensions: altruism (helping a specific person) and generalized compliance (conscientiousness) (Smith, Organ, & Near, 1983). Determinants of citizenship behaviour have focused on personality, and mood states (e.g., Puffer, 1987; Smith, et al., 1983), whereas the role of cognitions has not been extensively explored (Organ 1988). The current project addressed this gap in the literature by examining whether cognitions in the form of correctional attitudes were associated with citizenship behaviour. Logically one could expect that a characteristic such as altruism would be associated with more caring or human service type attitudes. For these reasons, it was hypothesized that staff with more positive correctional attitudes would yield higher citizenship behaviour scores.

Of final interest was intention to turnover. Given the cross-sectional nature of the current study, measurement of actual turnover was not possible. Conceptually,

behavioural intention is viewed as the final link between decision-making and behaviour (Steel & Ovalle, 1984). A meta-analytic review of 33 intention - turnover correlations reported an average correlation of .50 (Steel & Ovalle, 1984).

Causal models of turnover, within the organizational psychology literature, have examined variables such as pre-employment expectations and perceived job characteristics. Variables such as job satisfaction, and organizational commitment are also viewed as antecedents to turnover intention and actual turnover (Steel & Ovalle, 1984; Tett & Meyer, 1989; Williams & Hazer, 1986).

Within the field of corrections, Johnson and Price (1981) suggest that in custodial institutions, the attrition rate among human service workers is quite high. Empirical links between correctional attitudes and turnover intentions are inconsistent. Jurik and Winn (1987) found significant associations between correctional attitudes and thoughts about changing jobs ($r = -.22$), and willingness to change jobs ($r = -.28$). Thus, staff who were less rehabilitation oriented were more likely to consider alternative job prospects. In contrast, a non-significant association was reported by Teske and Williamson (1979). They operationalized (lack of) turnover intention as planning to remain with the organization until retirement; this is a stringent definition and may partially explain the non-significant finding. One study has examined the attitude - turnover association in C.S.C. staff. A 6 year follow-up study of 527 C.S.C. correctional officer recruits found those with negative correctional attitudes were just as likely to leave the organization as recruits with positive attitudes (Plecas & Maxim, 1991). Together these studies yield inconsistent conclusions.

Theoretically, one would expect that holding attitudes consistent with organizational goals would result in reduced turnover intentions and subsequent turnover. Empirically the results are inconclusive. For this research, it was hypothesized that intention to turnover would be negatively associated with favourable correctional attitudes, and positively associated with unfavourable correctional attitudes in this organization.

In summary, there is a dearth of studies examining the relationship between correctional attitudes and various work outcomes. Practical and theoretical considerations suggest assessment of this relationship is warranted.

Causation

Implicit in the current study was the assumption that attitudes about human service, inmate rehabilitation, etc. precede so-called 'outcome' variables. The temporal issue of causation is problematic with a cross-sectional design. The fundamental assumption made by the current research was that, at the individual level, the process begins with a person's attitudes and the expectations he/she brings to the job.

Theoretically, notions of person-environment are consistent with this perspective in that people are attracted to and remain with organizations that share goals similar to their own (Schneider, 1987). Further, literature on the stability of attitudes (Duffee, 1974) suggest this is a reasonable assumption. Research presented in the outcome variable section of this paper (e.g., longitudinal, path models) lend empirical support for this assumption. Other

correctional research has also made similar assumptions (e.g., Hawkins, 1976; Jurik, Halemba, et al., 1987; Plecas & Maxim, 1991).

The primary purpose of the present project was to explore the relationship between correctional attitudes and various work outcomes. This correlational level of analysis was a necessary first step towards an increased understanding. Emergence of significant associations in this project would support the utility of future research examining the causal nature of these relationships through longitudinal and experimental designs.

Canonical Analysis

One broad method for examining the relationship between two sets of variables is Canonical Analysis. Canonical Analysis (CA) or Canonical Correlation, as it is sometimes called, is the most general case of the general linear model, thus it is an extension of Multiple Regression, Discriminant Analysis, and Multivariate Analysis of Variance (MANOVA) (Thompson, 1984). It's fundamental advantage over other prediction methods is its ability to predict several criterion variables simultaneously (Rader, 1975). The logic for CA was developed by Hotelling in the 1930's, but it was not until the late seventies and early eighties, when computer software improved, that its application increased (Pedhauzer, 1982).

The basic goal of this statistical technique is to study the relationship between two sets of continuous or categorical variables (Tabachnick & Fidell, 1989). The two sets of variables can be thought of as a set of predictors and a set of criteria, a set of independent

and a set of dependent variables, or simply a set of variables on the left and a set of variables on the right (Pedhauzer, 1982). Examples of CA in the literature, include examination of the relationship between: a set of departmental characteristics and a set of departmental influence variables (Fornell, 1979); a set of cigarette brands and a set of perceived cigarette characteristics (Kuylen & Verhallen, 1981); a set of behavioural strategies and student laboratory outcomes (Okebukola, 1985); personality variables and substance use (Wingard, Huba, & Bentler, 1979).

CA may be most easily understood within the framework of multiple regression. In multiple regression the relationship between one dependent variable and a set of continuous variables is examined (Pedhauzer, 1982). CA extends this approach through the examination of the relationship between two sets of continuous variables. Just as the independent variables in MR form a linear combination, two linear combinations are formed in CA - one for the 'X' variables and one for the 'Y' variables. These combinations are formed by differentially weighting the variables to maximize the correlation between the two sets of variables. The bivariate correlation between the two linear combinations (canonical variates) is the Canonical Correlation ('R'). R-squared is an estimate of the variance shared by the two canonical variates; it is not an estimate of the variance shared by the X's and Y's (Pedhauzer, 1982). As there are more than one dependent variable in CA, it is possible to obtain more than one canonical correlation. Each canonical correlation, however, is independent of all others (Pedhauzer, 1982). Thus, the first R is the largest canonical correlation, the second R is the next largest canonical correlation, and these R's are uncorrelated. The maximum number of canonical correlations in any CA

is equal to the number of variables in the smaller set. In the present project there were five variables in the smaller set (work outcome variable set), therefore the maximum number of canonical correlations was five. Pedhauzer (1982) states that, similar to MR, not all canonical correlations are statistically significant and those that explain less than 10% of the variance are not substantively meaningful.

The type of questions answered by CA are summarized by Thompson (1982). Among them, the present research sought to address the following questions. First, at the most fundamental level, this project was designed to assess the extent to which the attitude variable set related to the outcome variable set. Second, what contribution did each attitude variable make to the explanatory power of the variables within its own set, as well as, to the composite of outcome variables. Third, the different ways in which variables in the attitude set explained different portions of the outcome variable set were also addressed. Fourth, the proportion of variance explained by each canonical function was examined. Finally, the stability of the canonical findings across subsamples was considered.

Although CA is a useful statistical technique in analysing certain types of data, its limitations can be grouped into general criticisms, theoretical concerns, and practical issues. A general criticism is that only a few intricate research questions are answered directly by CA (Tabachnick & Fidell, 1989). More specific questions are best answered by the specialized forms of CA (e.g. MR, DA, MANOVA). Therefore, Tabachnick & Fidell (1989) suggest that CA be considered a descriptive procedure rather than a hypothesis testing procedure. Thompson (1984) appears to disagree with this viewpoint

as a distinction in the use of CA is made between descriptive purposes and statistical significance testing. It is suggested that, within the hypothesis testing context, one additional statistical assumption is required - multivariate normality. This assumption is unnecessary in descriptive usage which makes no inferences about population parameters (Thompson, 1984).

Theoretical concerns focus on the issue of interpretability and stability (Tabachnick & Fidell, 1989). In terms of interpretability, CA is designed to maximize the correlation between CA variates and not necessarily to maximize their interpretation. Unfortunately, rotation of the solution, similar to factor analysis, is not available in all computer software packages. Secondly, CA computes pairs of CA variates that are independent of all other pairs. In some cases, non-orthogonality may make more sense theoretically, however CA offers no choice of an orthogonal or non-orthogonal solution. The third theoretical concern is that the results are sensitive to changes in the variables included. Removal of one variable may produce different results (Tabachnick & Fidell, 1989). This issue is also relevant to other statistical techniques including multiple regression. A fourth and related issue is that of stability of the results across samples or subsamples. As Thompson (1984) notes, this correlational technique more so than other correlational methods, tends to be extremely sensitive to chance variation. Accordingly, some form of stability assessment is advised (Thorndike, 1978). Two such methods, cross-validation and replication, both involve randomly splitting the sample into two subgroups. Cross-validation applies the Beta weights derived in the first subsample to the second sample; replication involves running separate canonical analyses on each of the subsamples and comparing the R's and

pattern of results. Rader (1975) suggests cross-validation be used if one's interest lies in the nature of the relationship between 2 variable sets, and that replication be used if interested in the degree of relationship. For current purposes, the nature of the relationship was of particular interest, thus cross-validation was employed.

Practical issues include the recommendation of at least 10 cases per variable (plus 50 more cases; Thorndike, 1978), and the inability to test the assumption of multivariate normality (Tabachnick & Fidell, 1989). Although the normality debate is ongoing (Thompson, 1984), it is generally assumed that if all variables are normally distributed multivariate normality is likely (Tabachnick & Fidell, 1989). Even opponents of this view accede that "when sample size is large, certain indices derived from the variables will be normally distributed even when the variables are not themselves distributed in a multivariate normal manner" (Thompson, 1984, p.18). Thus, this limitation may not be as critical as it initially appears.

A valid question is whether any other technique could be used in lieu of CA. Certainly, one viable alternative is a series of multiple regressions for each work outcome. In the current study, this would result in at least 5 separate regression analyses. One difficulty with the MR approach is that the increased number of analyses substantially raises the Type I error experiment-wise. The extent of this error is a function of the degree of correlation among the criterion variables (Thompson, 1984). In applied research, and more specifically for this research, it is reasonable to expect associations among outcome variables (e.g., job stress and job satisfaction; organizational commitment and intention to turnover). This relates to the second limitation of separate MR analyses.

Pragmatically, the MR approach ignores the reality of interrelations among criterion variables in an applied setting (Thompson, 1984). To ignore this richness within the data creates a sterile and unnatural reality.

To aid in the decision making process, Thompson (1984) recommends assessing the reality of the research context. Some variables may be more meaningfully examined separately (e.g. physical measurements, molar behaviours) whereas others may be more meaningfully examined in linear combination (e.g., inventory subscales, behavioural measures of traits). Kuylen & Verhallen (1981) state CA is appropriate when "... a composite criterion variate may better reflect reality than single criterion variables in separate regression analyses" (p. 228).

In summary, the primary purpose of the present research was to explore the relationship between a set of staff attitude variables and a set of work outcome variables within the field of corrections. CA was expected to answer questions regarding the relationship between these two sets of variables and within each variable set. This type of analysis was also expected to capture the complex reality of the applied setting. As such, CA was deemed the most appropriate statistical tool for this project.

Method

Participants

Participants consisted of a random sample of 477 front-line staff in the Correctional Service of Canada (CSC). These individuals had direct inmate contact and were from a variety of occupational groups including: Correctional Officers, Institutional Line Staff (maintenance, food services), Case Management Officers (community, institution), Professionals (teachers, psychologists, health care staff), and Correctional Supervisors (unit managers, area managers, correctional supervisors). This sample was part of a large scale attitude survey conducted on all occupational groups (front-line and non front-line) in the organization. The complete sample (N = 658) was randomly selected from a current listing of all CSC staff (N = 10,564).

Measures⁸ (Independent Variables)

Rehabilitation Scale. The Rehabilitation Scale (Cullen, et al., 1989) is a 9-item paper and pencil instrument measuring support for rehabilitation or rehabilitative efforts (e.g., 'Rehabilitating a criminal is just as important as making a criminal pay for his or her crime'). Each item is scored on a 7-point Likert scale ranging from 1 = very strongly agree to 7 = very strongly disagree. During the transcription of this questionnaire, a 3 point scale was included rather than the 7-point scale. This was not expected to vary the results to a large extent as often the scale's authors presented data using the 3-point rating

⁸ All measures can be found in Appendix C.

(e.g., Cullen, et al., 1989). Summing the items yields a total score with higher scores reflecting stronger support for rehabilitation. The scale was developed from a 55-item instrument that assessed attitudes towards various aspects of criminal sanctioning (Cullen & Gilbert, 1982; Cullen, Skovron, Scott, & Barton, 1990)

In its current form, the scale has been used with correctional staff, other criminal justice employees, and the public at large. Internal consistency values across samples were .79 (Cullen, et al., 1989), .84 (Cullen Clark, Cullen & Mathers, 1985), and .86 (Gillis, 1994). Support for the scale's validity includes correlations with a punishment scale ($r = -.48$), a punitive orientation scale ($r = -.39$), and death penalty endorsement ($r = -.44$) (Cullen Clark, et al., 1985; Gillis, 1994).

For the current study, a subjective rating of the subject's rehabilitation orientation was also completed by the interviewer after interacting with the subject for at least one hour. This rating was on a scale of 1 (low rehabilitation orientation) to 5 (high rehabilitation orientation).

Custody Scale. The Custody Scale (Cullen, et al., 1989) consists of seven items that measure attitudes supportive of a custodial orientation (e.g. 'An inmate will go straight only when he finds that prison life is hard'). Individual items are scored on a 7-point Likert scale and summed to yield a total score. Similar to the Rehabilitation scale, in this study a 3-point scale was used. Higher scores reflect stronger custodial views.

The Custody scale was derived by using 4 items from Poole & Regoli (1980) (see Appendix C items 2-5) and constructing 3 additional items (Cullen et al., 1989). It has been administered to correctional officers (Cullen, et al., 1989), and shop instructors

(Gillis, 1994). Previous research has yielded Cronbach alpha's of .64 (Cullen, et al., 1989) and .69 (Gillis, 1994). Support for construct validity was noted by Gillis (1994) with a correlation of .67 with a punitive orientation scale. Gillis (1994) also reported the correlation of .66 with Cullen's Rehabilitation scale.

An interviewer rating regarding the subject's Custody orientation was also available. The rating ranged from 1 (low) to 5 (High).

Professional Orientation Scale. The Professional Orientation scale (Klofas & Toch, 1982) is a 17-item scale that assesses an individual's "interest in work beyond pure custody and preference for moderate social distance from inmates" (Klofas & Toch 1982, p.240). Each item is scored on a 4-point Likert scale (i.e., 1 = strongly agree to 4 = strongly disagree). To obtain a total score, items are dichotomized (i.e., agree/disagree) and then summed (Klofas, 1984, 1986). Higher scores reflect a greater professional orientation. Generally results are reported in terms of the 4 factor analytically derived subscales rather than the total score. The subscales include: Counselling Role (3 items), Concern with Corruption of Authority (5 items), Social Distance (5 items), and Punitive Orientation (4 items). Counselling Role measures preference for rehabilitation or counselling; Social Distance taps preference for direct inmate contact; Concern with Corruption of Authority pertains to the degree of distrust of inmates; and Punitive Orientation examines preference for tough prison conditions for inmates (Whitehead & Lindquist, 1989).

The Professional Orientation scale was designed to provide a multi-dimensional approach to correctional attitude measurement, rather than the traditional rehabilitation-

custody perspective (Whitehead, Lindquist, & Klofas, 1987). It underwent 3 pre-tests, a factor analysis, and examination of reliability coefficients, divergent validity, and face validity from a correctional advisory group. Reliability of the complete scale has been reported at .85 (Klofas & Toch, 1982). Cronbach alphas for the 4 factors include: Concern with Corruption of Authority - .77, .65, .73, Counselling Role - .76 .78, not given, Social Distance - .75, .59, .71, and Punitive orientation - .72, .64, .70 (Klofas, 1984; Whitehead, et al., 1987; Gillis, 1994 respectively). Although primarily used with correctional officers, this instrument has been administered to probation and parole officers (Whitehead et al., 1987), and institutional shop instructors (Gillis, 1994). Replication of the factor structure was obtained using a separate Correctional Officer sample (Whitehead et al., 1987). With a Probation Officer sample, a 6 factor structure emerged using the 23-item version (Whitehead, et al., 1987). Discriminant validity was assessed by examining the magnitude of correlations with other job attitudes (criteria - r not to exceed .30). Correlations with job satisfaction, job stress, role conflict, burnout, and participation in decision-making ranged from $|.00$ to $.14|$ (Whitehead et al., 1987). Construct validity was noted by Gillis (1994) through an examination of correlations for 3 of the subscales (excluded Counselling Role) with Cullen's Rehabilitation and Custody scales. This set of correlations ranged from $|.14$ to $.72|$.

For purposes of the current research, minor adjustments in the wording of some scale items were necessary to ensure relevance to all staff. For example, 'A CO should work hard to earn trust from inmates' was altered to read 'Staff should work hard to earn trust from offenders'.

Attitudes Towards Correctional Work. The Attitudes Towards Correctional Work (ACOR) scale was developed for the proposed study and was intended to assess an individual's general interest in the field of corrections (e.g., 'Usually, I am not very proud to tell people that I earn my living working with criminals' - reverse scoring for this item). The 12-item scale is scored in a binary format (false = 0, true = 1) and is summed to obtain a total score. Higher scores reflect greater interest in correctional work.

Human Service Orientation Scale. The Human Service Orientation Scale (HS), also developed for use in this study, was designed to indicate the extent to which an individual prefers employment involving a helping or service component. The eight items are scored in a binary format (false = 0, true = 1) and summed with higher scores indicating a greater propensity for a human service approach (e.g., 'Work that allows me to help other people makes me feel like I am really making a difference').

Measures (Dependent Variables)

Job Satisfaction. Three scales were employed to measure job satisfaction; 2 were self-report scales and one was an interviewer rating. The two self-report measures, General Job Satisfaction and Growth Satisfaction, were obtained from the Job Diagnostic Survey (JDS) (Hackman & Oldham, 1980), an instrument that was derived on 1500 individuals in 100 different jobs, within 15 organizations (Hackman & Oldham, 1980). The 5-item General Job Satisfaction measure broadly assesses job satisfaction (e.g., 'Generally speaking I am very satisfied with this job') and is scored on a 7-point Likert scale (disagree strongly to agree strongly). Internal consistency has been reported at .76

(Hackman & Oldham, 1975). For the current study, the 2 items pertaining to views on other staff's job satisfaction were omitted, thus leaving a 3-item scale. The Growth Satisfaction scale measures an individual's satisfaction with opportunities to learn and personally develop (e.g., 'The amount of personal growth and development I get in doing my job'). This 4-item scale also uses a 7-point Likert scale with anchors from extremely dissatisfied to extremely satisfied. An alpha coefficient of .84 has been reported (Hackman & Oldham, 1975).

Previous research has assessed the discriminant validity of these scales by correlating each scale's items with all other satisfaction items in the JDS. The median correlation for General Job Satisfaction with other satisfaction items including growth satisfaction, internal work motivation, and other specific satisfactions (e.g., pay, supervisor) was .25 (Hackman & Oldham, 1975). The median correlation for Growth Satisfaction was .28 (Hackman & Oldham, 1975). Both satisfaction measures have been found to be associated with the motivating potential of a job (i.e., job characteristics) with correlations of .43 and .58 for General and Growth Satisfaction respectively. (Hackman & Oldham, 1976). The correlation between General Job Satisfaction and Growth Satisfaction has been reported at .67 (Hackman & Oldham, 1975).

The final assessment of job satisfaction was a general rating provided by the interviewer at the end of the interview. The rating ranged from 1 (low) to 5 (high).

Work Stress. Two methods were used to assess work stress. First, a six item self-report scale measuring anxiousness or pressure felt at work was employed (Cullen, Lemming, et al., 1985; Cullen, et al., 1989). Each item is scored on a 7-point rating scale

from disagree very strongly to agree very strongly. Internal consistency has been reported as .74 and .78 in correctional officer and police officer samples respectively (Cullen, et al., 1989; Cullen, Lemming, et al., 1985). Correlates of this scale include: life stress ($r = .63$, $.51$), job dissatisfaction ($r = .46$), role problems ($r = .38$, $r = .46$) and perceived dangerousness of the job ($r = .37$) (Cullen, Link, et al., 1985; Cullen, Lemming, et al., 1985; Cullen, et al., 1989). Tellier and Robinson (1995) reported a correlation of .44 between this work stress scale and fears about physical security in a sample of 1,837 front-line correctional staff.

The second method of tapping work stress was an interview-based rating. Anchors for the rating ranged from low work stress (1) to high work stress (5).

Organizational Commitment Questionnaire. The Organizational Commitment Questionnaire (Mowday et al., 1979) assessed the degree to which an individual identifies with the organization, its goals, and wishes to remain a member (e.g., 'I find that my values and the organizations's values are very similar'). The scale consists of 15 items which are scored on a 7-point Likert scale with anchors ranging from strongly agree to strongly disagree. Responses are summed and divided by 15 to provide an index of organizational commitment. Psychometric evaluations of the instrument have been conducted using employees in a variety of positions and organizations including: public servants, bank employees, retail employees, as well as psychiatric and general hospital staff⁹. Reliability estimates range from .82 to .93 (Mowday et al., 1979). A meta-analysis

⁹ This scale has also been used with correctional staff (Mayes & Ganster, 1988). Unfortunately, reliability data were based on a reduced item set (9 items, $\alpha = .81$).

on organizational commitment (Mathieu & Zajac, 1990) reported that across 80 published studies, the average internal consistency coefficient for this scale was .88 (s.d. = .038). Factor analyses performed on 6 separate samples have generally yielded a single factor solution (Mowday et al., 1979). Two to four month test-retest reliabilities range from .53 to .75 (Mowday et al., 1979).

Convergent validity has been demonstrated through examination of: similar affective responses (e.g., Sources of Attachment Questionnaire - 6 samples median r of .70); behavioural intentions to leave an organization (5 studies $Xr = .48$); motivation to perform questionnaires (4 studies r range .35 to .45); and a supervisory rating of commitment (1 study $r = .60$) (Mowday et al., 1979). The scale's discriminant validity was examined using various samples. The Organizational Commitment Questionnaire was moderately correlated with job involvement (4 samples $Xr = .49$), career satisfaction (.39 and .40), and job satisfaction (37 data points median $r = .43$) (Mowday et al., 1979). Last, predictive validity has been demonstrated with: turnover (9 data points $Xr = -.33$), tenure (.23, .26), absenteeism (.08, -.13, -.28), tardiness (-.48), and to a lesser extent with performance (7 data points $Xr = .17$) (Mowday et al., 1979; Mowday et al., 1982).

An interviewer also provided a 5 point rating (1 = low to 5 = high) regarding the subject's organizational commitment.

Job Performance. A multi-source approach was taken in the assessment of job performance. First, a 4-item scale was developed to measure work effort, quality, task focus, and efficiency. Participants and their supervisors independently completed this scale using a 5-point rating scale from unsatisfactory to outstanding. Second, the

researcher accessed the global performance rating from each subject's most recent performance appraisal.

Citizenship Scale. Organ and his colleagues have utilized several different instruments to measure organizational citizenship behaviours (Organ, 1988). This construct has been described as behaviour that is discretionary, not explicitly recognized by the formal system, and that promotes the overall functioning of the organization (Organ, 1988) (e.g., 'I help others when their work load increases by assisting them until they get over the hurdles'). Because a final version of the Organizational Citizenship Behaviors scale has yet to be developed, the proposed study utilized 19 items from a pool of existing items along with 3 new items to create a 22-item Citizenship Scale. Items are scored on a 7-point scale ranging from disagree completely to agree completely; higher scores indicate increased behavioural expression of citizenship.

In previous research, supervisors have completed this questionnaire with reference to a specific employee (Organ, 1988). In the present study, each respondent and his/her supervisor independently completed the scale. The supervisory version consisted of the same items, but the personal pronoun was changed from first to third person (i.e., 'He/she helps others when the work load ...').

Previous versions of the instrument have produced 2 or 3 factor solutions pertaining to Altruism and Conscientiousness (Smith et al., 1983), or Altruism, Diligence, and Attendance (Organ, 1988). Correlations with job satisfaction have ranged from .15 to .54 (8 studies) (Organ, 1988).

Intention to Turnover. Similar to other studies (Tett & Meyer, 1989), this variable was measured as a single item. Using Plecas and Maxim's (1991) wording, intention to turnover was operationalized by the following question: 'Have you applied for any jobs in that last six months? (check all that apply)'. Response options were: No, Yes within an institution, Yes within CSC but not within an institution, Yes outside CSC.

Social Desirability. To obtain a general indication of whether participants presented themselves in a favourable manner, a shortened version of the Marlow-Crowne Social Desirability Scale (M-C SDS) (Crowne & Marlow, 1964) was used. The M-C 1(10) (Strahan & Gerbasi, 1972) is a 10-item subset of the 33 original items. Kuder-Richardson reliability coefficients range from .59 to .70 across different samples (Strahan & Gerbasi, 1972).

Demographics. Demographic information was gathered from the questionnaire and included questions pertaining to: gender, year of birth, and level of education. Job specific information encompassed: current classification, and length of employment with this organization.

Procedure

The current project was part of a large scale study on commitment and aspirations of CSC employees. The study, conducted under the auspices of the organization's Research and Statistics Branch, generated a great deal of interest across departments and regions. The head of the organization (the Commissioner), and Union officials lent their support for the project.

Issues of confidentiality and integrity were of the utmost importance given the nature of the research. It was agreed that contracting out of certain portions of the project would be vital to the integrity of the project, as well as the magnitude of the study. External statistical consultation was obtained to ensure representativeness of the sample.

Twelve interviewers, selected by the author and a senior researcher, attended a four day training session, which included rationale for the project, introduction to the questionnaire and interview, as well as practical experience in administration of the questionnaire, interview, and consent forms. Interviewers were assigned to particular geographical locations across the country. Within their assigned region, a planned itinerary maximized access to targeted participants.

A number of strategies were developed to inform staff of the project and the possibility that they may be selected as participants. The head of the organization sent a letter to all wardens and parole office directors informing them of the project, requesting their co-operation in allowing staff to participate during working hours, and asking them to inform their staff of the project. Union officials from the Union of Solicitor General Employees (U.S.G.E.) wrote their membership encouraging participation. At the operational level, appointed regional and site contact people notified staff that they might be selected.

Sampling quotas were generated with the assistance of the Statistical Consultation Centre of Carleton University. The main criteria for deriving the quotas were sample representativeness based on the organization's regional divisions and occupational groups. Participant names were randomly selected by computer.

Initial contact with prospective participants was made by telephone. Each individual was informed that their name had been randomly selected, and a brief explanation of the study, time requirements, confidentiality, and voluntary nature of the study was outlined. They were then offered an opportunity to participate. If they agreed, a date and time was arranged for the questionnaire and interview. If the respondent indicated he/she was not available for participation, the reason for refusal was noted and the next name on the list contacted. Given that the study had to be completed within a three month time frame, which included summer months, a 50% backup list was generated for each target group (e.g., case management officers in the Atlantic region, case management officers in the Pacific region). This approach increased the opportunity to meet quotas thereby maximizing external validity. For the entire sample (front-line and non-front-line staff), a 12.6% refusal rate was obtained using this procedure¹⁰.

Questionnaire

The questionnaire was administered in groups of 6 to 10 participants on site during working hours. The one hour session began with a review of the study's aims, and participation issues (e.g., voluntary nature, confidentiality, time requirements). An introductory sheet was given to each participant summarizing these points (see Appendix D). After all questions were answered by the interviewer, a consent form was signed by each subject (see Appendix D). Participants then completed the questionnaire which examined a variety of topics including: attitudes towards corrections, organizational

¹⁰ This refusal rate was based on all occupational groups and included refusals to participate and 'no shows'. Data were not available by occupational group, therefore, computations could not be performed for this subsample of front-line staff.

commitment, personal and work stress, job performance, personality, and opinions about the job.

The final page of the questionnaire was a consent form seeking permission to obtain information from the participant's immediate supervisor (see Appendix D). The form outlined the voluntary nature of the consent, the specific type of information sought (i.e., performance information similar to what the participant completed in the questionnaire), and that in keeping with issues of confidentiality, information obtained from either source would not be shared with the other source.

Upon completion of the questionnaire, the interview time and location was confirmed with each participant. Subjects who failed to attend the questionnaire session were contacted to determine whether alternative arrangements could be made to facilitate participation.

Interview

The 2 hour individual interview was conducted at the work site in a private area. Issues of confidentiality and interview content were reviewed at the outset. The primary purpose of the interview was to examine specific sources of work stress and coping strategies. Additional information extracted from the interview included: background information, work aspirations within and outside CSC, and thoughts on the organization and its direction. Upon concluding the interview, the participant was asked to sign a separate consent form accessing his/her most recent performance appraisal (see Appendix D). The voluntary nature of this consent and issues of confidentiality were again stressed. Participants were offered an opportunity to make additional comments, or ask questions

of the interviewer. They were reminded that they would receive a copy of the overall study results and were thanked for their participation. Immediately after the interview, the interviewer completed 6 general ratings regarding the participant's rehabilitation orientation, custody orientation, job satisfaction, level of stress, organizational commitment, and degree of coping.

Analyses

First stage analyses consisted of descriptive statistics and psychometric evaluation. Sample characteristics were explored followed by a preliminary psychometric evaluation of test instruments. For variables with self-report and interviewer ratings (i.e., Rehabilitation orientation, Custody orientation, General Job Satisfaction, Organizational Commitment, Work Stress), the interviewer ratings were used as criterion validity for the corresponding self-report scale; the interviewer ratings were not included in subsequent analyses. The level of support for rehabilitation/benevolence across front-line staff was also examined in this set of analyses including inspection of group differences across job classifications, gender, years of service, and years of education. The role of social desirability with respect to the correctional attitude variables was also assessed.

Stage two analyses addressed the primary question posed by this research: what is the association between the set of attitude scales and the set of outcome measures. Correlation, canonical, and regression analyses were utilized to assess the relationship among the attitudes scales, among the outcome scales, and across attitude and outcome scales. This approach to data analysis has been used by others (e.g., Okebukola, 1985)

and yields a comprehensive view of interrelationships within and between variable sets. SPSS for Windows was used for most analyses, but SAS CANCORR was employed for the series of canonical analyses because of its features and simple interpretation (Tabachnick & Fidell, 1989).

In terms of the multiple regression (MR) analyses, although treating each work outcome as independent of each other was not representative of 'real world' functioning, it provided an opportunity to examine the dynamics of each attitude variable on each work outcome. Given the number of regression equations ($N=7$) the family-wise error rate was set at $\alpha = .007$ (.05 divided by the number of equations).

Prior to the CA and MR, an attempt was made to maximize the use of valid data and minimize the impact of missing data. The missing data issue is particularly salient in CA where sets of variables are combined. Here the potential increases for losing cases, reducing statistical power, and decreasing the stability of the CA as the analysis only utilizes data of participants who responded to all items on each scale. Thus, if a participant failed to complete even one item on any of the 11 scales, his/her data would be excluded from the analysis. Therefore, to retain as many cases as possible for this set of analyses, new variables were created using the following criteria.

1. For scales consisting of 6 or more items, if 50% of the items were valid (i.e., were responded to) a scale score was estimated based on those valid responses.
2. For scales consisting of 5 items, if 60% ($N = 3$) of the items were valid a scale score was estimated.
3. For scales consisting of 4 items, if 50% ($N = 2$) of the items were valid a scale score

was estimated.

4. For scales consisting of 3 items, if 66% ($N = 2$) of the items were valid a scale score was estimated.
5. For scales consisting of 1 or 2 items no estimate was made. The original computation method for these variables was maintained.

This procedure resulted in an increased sample size for these analyses. In the 11 variable CA, for example, the number of cases increased from 220 cases to 278 cases.

Based on initial descriptive analyses, another issue addressed prior to conducting the MR and CA was multicollinearity. Variables whose bivariate correlations with variables in their own set exceeded .70 were removed prior to these analyses. Before the MR analyses, the Custody and Punitive scales were removed as they were highly correlated with the Rehabilitation scale. Prior to the CA, General Job Satisfaction and Citizenship were also removed as the former measure was highly correlated with Growth Satisfaction, and the latter measure was strongly associated with Job Performance. Decisions regarding which variables to remove were theoretically and psychometrically based. The Rehabilitation scale was chosen for inclusion over the other two attitude measures as it was deemed to be more central to the study's focus and was stronger psychometrically. Growth Satisfaction was retained for the CA as it was perceived to be more specific and amenable to intervention than General Job Satisfaction. Psychometrically, it was also a stronger measure. Finally, Job Performance was selected over Citizenship as it is more commonly recognized in work settings as an evaluative tool. In contrast, Citizenship is a relatively new construct and is not routinely assessed in work

settings. This decision process resulted in the inclusion of 6 attitude variables for the MR. The same 6 attitude variables were used in the CA along with 5 work outcome variables.

One final issue to be addressed was the methodology for assessing stability of the CA solution. As outlined earlier, cross validation achieves this goal and is recommended when the nature of the relationship is of interest. The cross-validation procedures employed for this research were based on those outlined by Thorndike (1978) and Thompson (1984). More specifically, the canonical analysis was first run on a random selection of half the sample (Sample 1). Then standard scores (z scores) were computed on all relevant measures for each individual in the cross-validation group (Sample 2). For each pair of composites (an attitude composite and a work outcome composite), the z scores were then multiplied by the canonical (Beta) weights derived from the first sample and summed to yield scores on the two composites (Thorndike, 1978). The correlation between these composite scores was the cross-validation canonical correlation (invariance coefficient). This 'invariance coefficient' was then compared to the Sample 1 canonical correlation and examined for relative decrement (Thorndike, 1978). As recommended by Thorndike (1978), the loadings (correlations between a variable and its variate) were also examined to further assess stability of the results.

Results

Demographics

The sample consisted of 477 Correctional Service of Canada front-line staff from all geographical regions of the country. The largest occupational group comprising the sample was Correctional Officers (45.7%) followed by Case Management Officers (23.9%), Line staff (13.6%), Correctional Supervisors (9%), and Professionals (7.8%). Tables 1 through 3 list sample characteristics overall and by occupational group. Overall, 75.6% of the sample was male with an average age of 40.2 years and 10.5 years of service (see Tables 1 and 2). A fairly even split was found across educational background with 34% having a High School diploma or less, 33.8% some post secondary education, and 32.1% holding a university degree (see Table 3).

Sample differences across occupational groups were assessed using Chi-Square and Analysis of Variance (ANOVA) techniques. The Chi Square test for Gender ($X^2 (4, N = 439) = 30.37, p < .05$)¹¹ was statistically significant. Females were most equitably represented within the professional ranks (43.2% female), followed by Case Management (37.9%). In contrast, 25% of Correctional Supervisors were female, 19% of Correctional Officers, and 6.8% of Line staff. Significant ANOVAs were found for Age and Length of Service ($F (4, 425) = 6.41, p < .01$; $F (4, 436) = 4.78, p < .05$ respectively). Bonferroni post hoc comparisons for Age found that Case Management and Correctional Officers ($M = 38.7$ and 39.0 years of age respectively) were younger than Line staff and Professionals ($M = 42.9$ and 44.4 years of age respectively). Post hoc comparisons for Years of Service

¹¹ For this project, the significance level was set at $p < .05$. Some tests of significance may have reached the .01 or .001 level, but only the .05 level is reported.

Table 1. Descriptive statistics for Gender overall and by occupational group

Occupational Group	Male		Female	
	%	(N)	%	(N)
Correctional Officer	81.0	(162)	19.0	(38)
Case Management Officer	62.1	(64)	37.9	(39)
Line Staff	93.3	(55)	6.8	(4)
Professional	56.8	(21)	43.2	(16)
Correctional Supervisor	75.0	(30)	25.0	(10)
Overall	75.6	(332)	24.4	(107)

Table 2. Descriptive Statistics for Age and Years of Service overall and by occupational group.

Variable	Mean	Standard Deviation	N	Significantly Different Groups
Age				2,5 > 1,4
1 Correctional Officer	39.0	8.42	193	
2 Line Staff	42.9	8.41	59	
3 Correctional Supervisor	42.4	7.23	40	
4 Case Management Officer	38.7	7.90	102	
5 Professional	44.4	9.71	36	
Overall	40.2	8.52	430	
Years of Service				3 > 1,2,4,5
1 Correctional Officer	10.3	7.08	200	
2 Line Staff	9.3	6.60	60	
3 Correctional Supervisor	14.8	5.65	40	
4 Case Management Officer	10.2	6.41	104	
5 Professional	9.5	6.69	37	
Overall	10.5	6.83	441	

Note. Group differences were tested using the Modified least significant difference (Bonferroni) test with $p < .05$.

Table 3. Descriptive statistics for Level of Education overall and by occupational group.

	High School or less % (N)	Some Post Secondary % (N)	University Degree % (N)
Correctional Officer	44.6 (95)	41.8 (89)	13.6 (29)
Case Management Officer	9.7 (11)	15.9 (18)	74.3 (84)
Line Staff	60.9 (39)	37.5 (24)	1.6 (1)
Professional	13.5 (5)	40.5 (15)	45.9 (17)
Correctional Supervisor	23.3 (10)	30.2 (13)	46.5 (20)
Overall	34.0 (160)	33.8 (159)	32.1 (151)

found Correctional Supervisors ($M = 14.8$ years of service) had significantly more service than all other occupational groups (M range 9.3 to 10.3 years of service). Significant Chi Square differences were noted for Education ($X^2(8, N = 470) = 170.80, p < .05$). The occupational group with the greatest proportion having a university degree was Case Management (74.3), followed by Correctional Supervisors (46.5%), Professionals (45.9%), Correctional Officers (13.6%), and Line staff (1.6%).

Psychometrics

Table 4 displays internal consistency estimates for the correctional attitude scales and correlations among these scales. Reliability of the established attitude measures ranged from .74 (Custody orientation) to .82 (Rehabilitation orientation). These are acceptable¹² levels of internal consistency and were consistent with previous research on these measures.

The magnitude and direction of association among the established attitude scales was consistent with expectation. For example, favourable correctional attitudes (i.e., Rehabilitation, Counseling) were positively associated with each other and negatively associated with unfavourable correctional attitudes (i.e., Custody, Punitive, Social Distance, Concern with Corruption). The magnitude of association among Rehabilitation, Custody, and Punitive scales indicated the presence of multicollinearity. Thus, subsequent statistical analyses involving these scales took this into account.

¹² Based on Nunally & Bernstein's (1994) criterion of $\alpha \geq .70$.

Table 4. Correlations among the correctional attitude scales and internal consistency estimates for each scale.

	Rehab	Custody	Punitive	Distance	Counsel	Corrupt	HS	ACOR
Rehab	.82 (424)							
Custody	-.70 (415)	.74 (426)						
Punitive	-.73 (409)	.74 (411)	.81 (422)					
Distance	-.54 (394)	.47 (395)	.56 (396)	.75 (407)				
Counsel	.37 (416)	-.40 (418)	-.40 (417)	-.33 (399)	.76 (431)			
Corrupt	-.51 (409)	.51 (408)	.60 (409)	.54 (392)	-.35 (415)	.80 (420)		
HS	.44 (403)	-.36 (403)	-.36 (400)	-.44 (389)	.22 (408)	-.30 (399)	.70 (416)	
ACOR	.50 (393)	-.49 (396)	-.49 (398)	-.40 (382)	.35 (401)	-.37 (393)	.43 (389)	.79 (412)

Note:

All inter-scale correlations are statistically significant

N's in brackets ()

Internal consistency (alpha's) are on the diagonal

The 2 attitudes scales developed specifically for this study, Human Service Orientation (HS) and Attitudes Towards Correctional Work (ACOR), yielded internal consistency values of .70 and .79 respectively. Factor analyses were conducted on these new measures using Principal Components Analysis as the extraction method and varimax rotation. Other extraction measures (Maximum Likelihood, Generalized Least Squares) yielded similar results to those reported here. As shown in Table 5, a two-factor solution was obtained for the HS scale explaining 47.2% of the variance. Factor 1 pertained to an interest in working with people and Factor 2 an interest in contributing to society. The ACOR measure yielded a three-factor solution that explained 50.2% of the scale's variance (see Table 6). Factor 1 could be described as tapping a preference for a career in corrections/offender contact. Factor 2 tapped perceptions of the public's view on correctional work, and Factor 3 could be interpreted as assessing the challenge of correctional work. Correlations for the HS and ACOR factor scores with the other correctional attitude measures can be found in Appendix E.

Correlations for the full scale HS and ACOR measures with the established attitude scales were of similar magnitude and direction as those found across the established measures. For example, a Human Service approach was positively associated with a Rehabilitation orientation ($r = .44$) and negatively associated with a preference for Social Distance from inmates ($r = -.44$). Similarly, a favourable Attitude Towards Correctional Work was positively associated with a Rehabilitation orientation ($r = .50$) and negatively associated with Custodial or Punitive views ($r = -.49$).

Table 5. Factor loadings for the Human Service Orientation scale.

Scale Item	Factor 1	Factor 2
3. A job involving talking to people about their problems is more meaningful	.7998	.0842
1. I prefer a job that helps people solve problems	.7972	.0331
6. If a new career, it would be in a helping profession	.6634	.0280
4. Work helping others makes me feel like I am making a difference	.6248	.2783
8. More satisfaction from working with people	.4585	.0680
2. I get a lot of satisfaction from working with those less fortunate	.4566	.2267
7. Administrative work is O.K. if it helps solve major societal problems	.0568	.7573
5. I don't have to work with people to feel I am making a contribution to society (R)	.1423	.7150
Eigenvalue	2.7570	1.0180
Variance Explained	34.50%	12.70%

Note:

The Scale Item column indicates the essence of each item. See Appendix C for exact item wording.

Table 6. Factor loadings for the Attitudes Towards Correctional Work (ACOR) scale.

Scale Item	Factor 1	Factor 2	Factor 3
3. I'd prefer to work with non-offenders (R)	.7314	.0945	.1919
9. I'd prefer to have a job in a different field (R)	.6593	.2475	.3037
12. Corrections O.K. if you didn't have to work directly with offenders (R)	.6434	.0329	-.0668
4. If not for good pay, I would not have a career in corrections (R)	.6409	.2352	.2541
1. Corrections has a bad image with the public (R)	.1041	.6773	-.0637
11. I agree that corrections is not a very respectable job (R)	.0591	.6549	.0881
8. I am usually not very proud to say I work with criminals (R)	.1751	.6528	.0759
7. Corrections gives me a personal sense of pride and accomplishment	.2014	.4948	.4793
6. More good than bad about a career in corrections	.2855	.3769	.3462
5. Offenders are the most interesting and challenging type to work with	.1481	-.2337	.7115
2. One of most rewarding elements is the challenge of work	-.0474	.3693	.7076
10. What attracts me most to corrections is the type of work	.3362	.0680	.5739
Eigenvalue	3.6506	1.309	1.0637
Variance Explained	30.40%	10.90%	8.90%

Note:

The Scale Item column indicates the essence of each item. See Appendix C for exact item wording.

Table 7 shows that the alpha coefficients for the set of work outcome measures also yielded acceptable levels of internal consistency ranging from .74 (General Job Satisfaction) to .93 (Citizenship). These reliability estimates were consistent with past research on these measures. Inspection of the inter-correlations among work outcome variables indicated relationships in expected directions. For example, positive correlations were obtained among General Job Satisfaction, Growth Satisfaction, Organizational Commitment, and the performance measures, whereas negative correlations were obtained between these same variables and Work Stress and Intention to Turnover. The magnitude of the correlation between the satisfaction measures (i.e., General Job Satisfaction and Growth Satisfaction $r = .70$) and the 2 performance measures (i.e., Job Performance and Citizenship behaviours $r = .72$) raised concerns regarding multicollinearity and thus had implications for subsequent analyses involving these measures. The strongest inter-correlations, aside from those just noted, were between Organizational Commitment and other variables ($r = |.16 \text{ to } .68|$). Among the weakest were correlations involving Intention to Turnover ($r = |.09 \text{ to } .28|$). Overall the magnitude of the work outcome correlations supported the notion that, in this applied setting, these criterion variables were associated. Thus a technique such as canonical analysis which acknowledges the presence of these intercorrelations, appeared to be a viable approach to subsequent data analyses. Appendix F provides descriptive statistics on each work outcome variable.

Table 8 presents correlations between the respondent's self-report on 7 measures and other sources of information including: interviewer ratings, supervisory responses on parallel instrument versions, and official performance appraisal information.

Table 7. Correlations among the work outcome variables and internal consistency estimates for each scale.

	GenSat	Growth	WStress	OrgCom	JobPerf	Citizenship	ITurnover
GenSat	.74 (440)						
Growth	.70* (439)	.83 (439)					
WStress	-.40* (434)	-.34* (433)	.82 (435)				
OrgCom	.66* (429)	.60* (428)	-.37* (427)	.87 (430)			
JobPerf	.16* (283)	.27* (282)	-.03 (281)	.16* (276)	.89 (301)		
Citizenship	.24* (271)	.39* (270)	-.08 (268)	.28* (263)	.72* (286)	.93 (288)	
ITurnover	-.31* (437)	-.25* (436)	.14* (432)	-.22* (427)	-.09 (283)	-.15* (270)	N/A (439)

Note:

* significant interscale correlations

N's in brackets ()

Internal consistency (alpha's) are on the diagonal

N/A reliability not applicable as is a single item

Table 8. Correlations between different sources of information.

Construct	Sources	r	(N)
Rehab	S-R vs. Interviewer rating	.56*	(392)
Custody	S-R vs. Interviewer rating	.43*	(391)
GenSat	S-R vs. Interviewer rating	.48*	(414)
WStress	S-R vs. Interviewer rating	.29*	(408)
OrgCom	S-R vs. Interviewer rating	.46*	(403)
JobPerf	S-R vs. Supervisor's-report	.14*	(283)
JobPerf	S-R vs. GPAR	.21*	(380)
JobPerf	Supervisor's-report vs. GPAR	.31*	(267)
Citizenship	S-R vs. Supervisor's-report	.29*	(261)

* $p < .02$

S-R = respondent's self-report

GPAR = global performance appraisal rating

The correlation between 5 self-report measures and interviewer ratings on these same constructs ranged from .29 (Work Stress) to .56 (Rehabilitation orientation). The magnitude of most of these correlations was quite high for both attitude and work outcome measures. Correlations between self-report and supervisor responses on the Citizenship and Job Performance measures were .29 and .14 respectively. The relationship between the respondent's global performance appraisal rating and his/her own responses on the Job Performance scale was $r = .21$. The correlation between the supervisor's responses on the Job Performance scale and a global performance appraisal rating yielded an $r = .31$.

Correctional Attitudes - Level of Support

To test the hypothesis that the level of support for favourable correctional attitudes (e.g., Rehabilitation, Counseling) would be greater than support for unfavourable correctional attitudes (e.g., Custody, Punitive), percentages and means were explored. As Table 9 indicates, favourable correctional attitudes were held by the majority of front-line staff with percentages¹³ ranging from 82.3% (Counseling) to 73% (ACOR). Unfavourable correctional attitudes were endorsed by a smaller percentage of front-line staff with values ranging from 58.7% (Concern with Corruption of Authority) to 29.4% (Social Distance).

¹³ 'Percent Agreement' was calculated by dichotomizing (no/yes) each attitude variable using the scale's mid-point as the cut-off. Scores falling below the midpoint were coded as 'No' and scores at or above the midpoint were coded as 'Yes'.

Table 9. Percentage agreement on correctional attitude variables.

Correctional Attitude	% Agreement
Favourable Correctional Attitudes	
Counseling Role	82.3
Human Service Orientation	78.4
Rehabilitation Orientation	75.4
Attitudes towards Corrections	73.0
Unfavourable Correctional Attitudes	
Concerned with Corruption of Authority	58.7
Custody Orientation	35.8
Punitive Prison Conditions	35.6
Social Distance	29.4

Figure 1 and Table 10 present overall mean scores on each correctional attitude measure. The visual representation of the overall means in Figure 1 illustrate that, for the measures tapping favourable correctional attitudes, all means were above their midpoint. This indicates for example that, on average, front-line staff were supportive of rehabilitative and human service approaches. Similarly for unfavourable attitudes, mean scores fell below the midpoint indicating, on average, less support for custodial or punitive approaches. One exception to this pattern was Concern with Corruption of Authority with an overall mean of 2.6 which was slightly above the midpoint of 2.5.

Table 10 also presents the means across occupational groups on each correctional attitude measure. Visual inspection of the occupational group means indicates that, for the favourable correctional attitude scales, even the lowest group mean exceeded its respective scale midpoint. Similarly, for the unfavourable correctional attitude scales, the highest group mean did not exceed the midpoint with one exception. For the Concern with Corruption of Authority scale, mean scores for Line staff ($M = 2.7$) and Correctional Officers ($M = 2.9$) were above the scale midpoint of 2.5. Overall, these observations suggest that even groups with the least supportive correctional attitudes held neutral to favourable correctional attitudes.

ANOVA was used to test the hypothesis of mean differences across occupational groups on these correctional attitude measures. As shown in Table 11, all ANOVAs were statistically significant indicating group differences on all correctional attitude measures. Post hoc analyses (see Table 10) using the Modified Least Significant Difference (Bonferroni) test generally differentiated Correctional Officers and Line staff from

Figure 1. Overall mean score for each correctional attitude scale.**Favourable Correctional Attitudes** **Unfavourable Correctional Attitudes**

Table 10. Descriptive statistics for the correctional attitude variables overall and by occupational group.

Variable	Mean	Standard Deviation	N	Significantly Different Groups
Favourable Correctional Attitudes				
Rehabilitation				3,4,5 > 1,2
1 Correctional Officer	2.08	.52	192	
2 Line Staff	2.15	.42	57	
3 Correctional Supervisor	2.41	.43	37	
4 Case Management Officer	2.58	.30	103	
5 Professional	2.54	.26	35	
Overall	2.28	.49	424	
Counsel				3,4 > 1,2
1 Correctional Officer	2.94	.72	197	
2 Line Staff	2.99	.61	54	
3 Correctional Supervisor	3.41	.57	40	
4 Case Management Officer	3.34	.59	103	
5 Professional	3.14	.74	37	
Overall	3.10	.69	431	
HS				4,5 > 1,2
1 Correctional Officer	.61	.28	195	
2 Line Staff	.58	.27	54	
3 Correctional Supervisor	.63	.26	38	
4 Case Management Officer	.71	.19	97	
5 Professional	.79	.19	32	
Overall	.65	.26	416	
ACOR				3,4,5, > 1
1 Correctional Officer	.54	.24	188	
2 Line Staff	.64	.21	53	
3 Correctional Supervisor	.68	.27	38	
4 Case Management Officer	.72	.22	94	
5 Professional	.76	.22	34	
Overall	.62	.25	407	

(cont'd)

Table 10 (cont'd).

Variable	Mean	Standard Deviation	N	Significantly Different Groups
Unfavourable Correctional Attitudes				
Custody				1,2 > 3,4,5
1 Correctional Officer	1.97	.50	196	
2 Line Staff	1.93	.42	57	
3 Correctional Supervisor	1.55	.46	37	
4 Case Management Officer	1.52	.38	100	
5 Professional	1.45	.43	36	
Overall	1.78	.50	426	
Punitive				1,2 > 3,4,5
1 Correctional Officer	2.49	.68	192	
2 Line Staff	2.44	.63	55	
3 Correctional Supervisor	1.97	.79	38	
4 Case Management Officer	1.85	.52	102	
5 Professional	1.79	.65	35	
Overall	2.23	.71	422	
Distance				1 > 3,4,5 2 > 4,5
1 Correctional Officer	2.46	.55	185	
2 Line Staff	2.28	.53	50	
3 Correctional Supervisor	2.19	.56	37	
4 Case Management Officer	1.99	.45	100	
5 Professional	1.93	.43	35	
Overall	2.25	.56	407	
Corrupt				1 > 3,4,5 2 > 3
1 Correctional Officer	2.85	.57	194	
2 Line Staff	2.70	.61	56	
3 Correctional Supervisor	2.43	.57	36	
4 Case Management Officer	2.32	.64	98	
5 Professional	2.41	.48	36	
Overall	2.63	.63	420	

Note. Group differences were tested using the Modified least significant difference (Bonferroni) test with $p < .05$.

Table 11. Analyses of Variance across occupational groups on each correctional attitude scale.

Correctional Attitude	Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Rehab	Between	4	20.63	5.16	27.31	.05
	Within	419	79.13	.19		
	Total	423	99.75			
Counsel	Between	4	15.10	3.77	8.49	.05
	Within	426	189.38	.45		
	Total	430	204.48			
HS	Between	4	1.63	.41	6.48	.05
	Within	411	25.92	.06		
	Total	415	27.56			
ACOR	Between	4	2.96	.74	13.60	.05
	Within	402	21.90	.05		
	Total	406	24.86			
Custody	Between	4	21.35	5.34	26.02	.05
	Within	421	86.36	.21		
	Total	425	107.71			
Punitive	Between	4	39.86	9.97	23.98	.05
	Within	417	173.33	.42		
	Total	421	213.19			
Distance	Between	4	18.50	4.63	17.42	.05
	Within	402	106.73	.27		
	Total	406	125.23			
Corrupt	Between	4	22.44	5.61	16.27	.05
	Within	415	143.09	.34		
	Total	419	165.53			

Correctional Supervisors, Case Management Officers and Professionals on these attitude measures.

Relationship between Correctional Attitudes and Demographics

The correctional attitude scales were examined for relationships with Gender, Age, Education, Years of Service, and Social Desirability (see Table 12)¹⁴. Given the large sample size, statistically significant correlations were considered substantive if $r \geq .15$. Using this criterion, 16 of the 40 correlations were statistically and substantively significant. Table 12 also lists average effect size estimates (average means) across attitude variables for each demographic variable.

Five of the 8 attitude scales were associated with Gender; females reported more positive attitudes towards corrections, human service, and rehabilitation, and less support for custodial and punitive attitudes than males. The average effect size estimate was .14. Age yielded 3 significant associations for: Social Distance, Human Service, and Concern with Corruption with older subjects being more human service oriented, and less interested in further social distance, and less concerned with corruption of authority. Overall, the average correlation was .13. Education was significantly associated with all correctional attitude scales, except the Human Service scale; the direction of association indicated that those with higher education held more favourable attitudes towards corrections and rehabilitative ideals, and showed less interest in Custody, Punitive, Social Distance, or Concern with Corruption. The average correlation for Education was .24.

¹⁴ Appendix E lists the correlations for the HS and ACOR factor scores with these demographic variables.

Table 12. Correlations between the correctional attitude scales and demographic variables.

Correctional Attitude	Demographics				
	Gender	Age	Education	Years of Service	Social Desirability
Favourable Correctional Attitudes					
Rehab	.19* (421)	.05 (412)	.34* (422)	-.04 (423)	.06 (414)
Counsel	.02 (428)	.05 (419)	.15* (430)	.04 (430)	.03 (421)
HS	.15* (413)	.21* (404)	.10* (414)	-.02 (415)	.11* (407)
ACOR	.22* (404)	.08 (396)	.22* (406)	-.10* (406)	.08 (400)
Unfavourable Correctional Attitudes					
Custody	-.23* (423)	-.08 (414)	-.35* (425)	.00 (425)	-.05 (417)
Punitive	-.17* (419)	-.10* (410)	-.35* (422)	-.02 (421)	-.07 (414)
Distance	-.09 (404)	-.26* (395)	-.24* (406)	-.12* (406)	-.02 (400)
Corrupt	-.01 (417)	-.19* (409)	-.19* (418)	-.21* (419)	-.10* (412)
Mean r	.14	.13	.24	.03	.07

Note:

* statistically significant $p < .05$

N's in brackets ()

Years of Service yielded only 1 significant association (Concern with Corruption) and the overall average effect size estimate was .03. Social Desirability had no substantive correlation with any correctional attitude scale (i.e., staff who were more supportive of favourable correctional attitudes did not try to present themselves in a more positive manner) and yielded an average effect size of .07.

Consistent with the findings in Table 4, these demographic results yielded correlations of similar magnitude for the Rehabilitation, Custody, and Punitive scales. For example, correlations with Education were .34 (Rehabilitation) and -.35 (both Custody and Punitive). This lends further support to the notion that these scales may tap similar constructs.

Relationship between Correctional Attitudes and Work Outcomes

Hypothesis testing regarding the nature and magnitude of the relationship between the correctional attitude variable set and the work outcome variable set began with inspection of the simple correlation matrix. The ACOR factor scores variables (ACORF1 through ACORF3) were included in this analysis as these variables were used in subsequent attitude - work outcome analyses. Table 13 indicates correlations ranged from $|r| = .01$ (HS with Job Performance & Citizenship) to $|r| = .64$ (ACOR with Organizational Commitment). The direction of association consistently showed that favourable correctional attitudes were positively associated with desirable work outcomes (i.e., General Job Satisfaction, Growth Satisfaction, Organizational Commitment, Job Performance) and negatively associated with undesirable work outcomes (i.e., Work

Table 13. Correlations between the correctional attitude scales and the work outcome scales.

Correctional Attitude	Work Outcomes						
	GenSat	Growth	OrgCom	JobPerf	Citizenship	WStress	ITurn
Favourable Correctional Attitudes							
Rehab	.25* (423)	.39* (422)	.37* (417)	.17* (271)	.24* (258)	-.19* (421)	-.08 (421)
Counsel	.22* (430)	.25* (429)	.25* (422)	.19* (279)	.23* (265)	-.20* (426)	-.07 (428)
HS	.24* (415)	.26* (414)	.32* (408)	-.01 (267)	.01 (255)	-.15* (413)	-.05 (413)
ACOR	.56* (405)	.58* (405)	.64* (401)	.21* (261)	.29* (248)	-.33* (403)	-.16* (404)
ACORF1	.43* (422)	.36* (421)	.47* (416)	.17* (272)	.20* (258)	-.29* (419)	-.09 (420)
ACORF2	.38* (428)	.39* (427)	.45* (421)	.12* (276)	.17* (263)	-.25* (424)	-.18* (426)
ACORF3	.34* (424)	.44* (423)	.41* (417)	.17* (276)	.22* (263)	-.15* (420)	-.06 (422)
Unfavourable Correctional Attitudes							
Custody	-.16* (425)	-.34* (424)	-.29 (419)	-.12 (273)	-.17* (260)	.24* (421)	.06 (423)
Punitive	-.19* (421)	-.39* (420)	-.34* (414)	-.20* (271)	-.25* (258)	.29* (417)	.09* (419)
Distance	-.15* (406)	-.32* (405)	-.26* (398)	-.10 (259)	-.16* (245)	.14* (403)	.03 (404)
Corrupt	-.16* (419)	-.28* (418)	-.18* (411)	-.13* (273)	-.19* (259)	.22* (416)	.08 (417)
Mean r	.24	.35	.33	.14	.19	.22	.08

Note:

* $p < .05$

N's in brackets ()

Mean r based on full scale attitude measures only; they exclude ACORF1, ACORF2, and ACORF3.

Stress, Intention to Turnover). Similarly unfavourable correctional attitudes were positively associated with undesirable outcomes and negatively associated with desirable outcomes.

Two other notable observations included the magnitude of certain correlations. First, among the correctional attitude measures, ACOR showed the strongest correlations with the outcome variables (r 's ranged $|.16$ to $.64|$) and all were statistically significant at the $p < .05$ level. Second, among the work outcomes, Intention to Turnover showed the weakest associations with the attitudes variables; only 3 statistically significant associations (ACORF2 $r = -.18$; ACOR $r = -.16$; Punitive $r = .09$) were found and values ranged from $|.00$ to $.18|$. The average effect size estimates (mean r) for each work outcome variable is also listed in Table 13. These estimates were based only on the full scale attitude measures, thus they excluded the ACOR factor scores. Results indicated average correlations ranged from $Xr = .08$ (Intention to Turnover) to $Xr = .35$ (Growth Satisfaction).

The next set of analyses were a series of canonical correlation analyses. These analyses provided an examination of the relationship between and within variable sets. Recall that because of concerns regarding multicollinearity, only 6 of the 8 attitude variables and 5 of the 7 work outcome variables were included in this CA resulting in the use of 11 variables. To maximize power (Tabachnick & Fidell, 1989) and stability of results (Thorndike, 1978) the total sample was used for most canonical analyses, but the sample was randomly divided in half for the cross-validation assessment (Tabachnick & Fidell, 1989).

Results, using 11 variables and the total sample, indicated the first canonical correlation of .66 (44% of the variance) was statistically significant, $F(30,1070) = 6.68$, $p < .05$. The remaining canonical correlations were not statistically significant. As shown in Table 14, using a cutoff correlation (loading) of .3 (Tabachnick & Fidell, 1989), all of the variables in the attitudinal set were correlated with the first canonical variate. This included: Attitudes Towards Correctional Work (.99), Rehabilitation (.61), Social Distance (-.46), Human Service (.42), Counseling Role (.41), and Concern with Corruption of Authority (-.34). Among the work outcome variables: Organizational Commitment (.95), Growth Satisfaction, (.79), Work Stress (-.52), and Job Performance (.31) were correlated with the first canonical variate. Intention to Turnover was not significantly associated with the first canonical variate. Based on standardized canonical coefficients, it appears that most emphasis for the attitudinal variables was on Attitudes Towards Correctional Work ($B=.91$) and that Concern for Corruption of Authority was a suppressor variable ($B=.11$ not $-.11$). For the work outcome variables, Organizational Commitment ($B=.74$) and Growth Satisfaction ($B=.31$) carried the most weight, while Intention to Turnover ($B=.13$ not $-.13$) was a suppressor variable. Together the correlations and standardized coefficients indicated that positive Attitudes Towards Correctional Work, a Rehabilitation orientation, preference for less Social Distance, a Human Service approach, preference for a Counseling Role, and more Concern with Corruption of Authority were associated with stronger Organizational Commitment, more Growth Satisfaction, less Work Stress, and better Job Performance. Further, the first canonical variate explained 34% of the variance in the correctional attitude variables, and

Table 14. Canonical results using 11 variables for the total sample and cross-validation samples.

	<u>Total Sample</u> <u>(N = 278)</u>		<u>Sample 1</u> <u>(N = 139)</u>		<u>Sample 2</u> <u>(N = 139)</u>	
	Corr.	Coeff.	Corr.	Coeff.	Corr.	Coeff.
<u>Attitude set</u>						
ACOR	.99	.91	.98	.94	.98	N/A
Rehab	.61	.15	.58	.14	.59	N/A
Distance	-.46	-.05	-.43	.04	-.46	N/A
HS	.42	.01	.59	.14	.24	N/A
Counsel	.41	.04	.35	-.11	.40	N/A
Corrupt	-.34	.11	-.26	.11	-.36	N/A
% of Variance	34%		34%		N/A	
Redundancy	15%		15%		N/A	
<u>Outcome Set</u>						
Orgcom	.95	.74	.98	.84	.91	N/A
Growth	.79	.31	.73	.17	.83	N/A
WStress	-.52	-.09	-.46	-.12	-.54	N/A
JobPerf	.31	.13	.22	.08	.38	N/A
ITurnover	-.19	.13	-.37	.03	-.04	N/A
% of Variance	38%		38%		N/A	
Redundancy	17%		16%		N/A	
Canonical Corr	.66		.66		.63*	
Canonical Corr Squ.	.44		.43		.40**	

Note.

Corr. is the correlation between the variable and its canonical variate (also referred to as 'loadings').

Coeff. is the standardized coefficient (B weight) for a particular variable.

Canonical Corr Squ is the Canonical Correlation Squared.

* This value is the Cross-validation/Invariance Coefficient derived from using the Beta weights in Sample 1.

** This value is the Cross-validation coefficient squared.

38% of the variance in the work outcome variables. In terms of redundancies, 15% of the variance in the work outcome variables was accounted for by the attitudinal variate, and 17% of the variance in the attitudinal variables was accounted for by the work outcome variate.

Table 14 also presents the results of the cross-validation. The cross-validation sample produced an invariance coefficient (R_c) of .63. This value showed minimal decrement when compared to the Sample 1 canonical correlation (R_c) of .66, thus demonstrating stability of results. Comparison of the loadings/correlations indicates that the first canonical function in both Sample 1 and Sample 2 loaded most heavily on ACOR and Rehabilitation on the attitude side, and Organizational Commitment and Growth Satisfaction on the work outcome side. Some variation in less important variables was noted using the $r = .30$ cut off criterion. That is, Concern with Corruption of Authority ($r = -.26$) did not load on the attitude variate in Sample 1, while Human Service ($r = .24$) did not load on this variate in Sample 2. On the work outcome side, Job Performance was non-significant in Sample 1 but significant in Sample 2, and Intention to Turnover was significant in Sample 1 but non-significant in Sample 2.

Given that the Attitudes Towards Correctional Work (ACOR) variable was so strongly associated with variables in both variable sets, the analysis was rerun first using its 3 factors (see Table 15: 13 variable analysis) instead of ACOR, and then without any reference to ACOR or its factors (Table 15: 10 variable analysis). When the 3 factor score variables (ACORF1, ACORF2, ACORF3) were used, the first 2 canonical correlations were statistically significant. The first canonical correlation of .62 explained

Table 15. First Canonical Correlation for the 13 variable and 10 variable solutions.

	13 Variable Analysis First Canonical <u>Correlation (N=276)</u> Corr. Coeff.		10 Variable Analysis First Canonical <u>Correlation (N=278)</u> Corr. Coeff.	
<u>Attitude set</u>				
ACORF1	.78	.43	N/A	N/A
ACORF2	.71	.37	N/A	N/A
ACORF3	.68	.31	N/A	N/A
Rehab	.66	.17	.94	.68
Distance	-.50	-.10	-.71	-.26
HS	.46	.06	.56	.09
Counsel	.45	.08	.63	.25
Corrupt	-.37	.11	-.57	.04
% of Variance	35%		48%	
Redundancy	14%		10%	
<u>Outcome Set</u>				
Orgcom	.94	.73	.82	.45
Growth	.79	.31	.91	.60
WStress	-.52	-.10	-.45	-.05
JobPerf	.32	.15	.42	.21
ITurnover	-.18	.15	-.15	.16
% of Variance	38%		38%	
Redundancy	15%		8%	
Canonical Correlation	.62		.45	
Canonical Corr Squ.	.39		.21	

Note.

Corr. is the correlation between the variable and its canonical variate (also referred to as 'loadings').

Coeff. is the standardized coefficient (B weight) for a particular variable.

Canonical Corr Squ is the Canonical Correlation Squared.

39% of the variance ($F(40, 1149.19) = 4.64, p < .05$) and produced the same pattern of results as the 11 variable/total sample solution. That is, all attitudinal variables were correlated with the first canonical variate and all outcome variables, except Intention to Turnover, were correlated with the first canonical variate. Concern with Corruption and Intention to Turnover were also suppressor variables in this solution. Based on the standardized coefficients, the ACOR factor variables ($B = .43, B = .37, B = .31$ respectively) remained the most important contributors to the attitudinal variate, and Organizational Commitment remained the most important contributor to the work outcome canonical variate ($B = .73$). The first canonical variate explained similar proportions of variance in each variable set (35% attitude variables; 38% work outcome variables). Redundancies were also similar with 14% of the variance in work outcomes variable accounted for by the attitudinal variate, and 15% of the variance in attitudinal measures accounted for by the work outcome variate.

The second canonical correlation of .29 explained 9% of the variance ($F(28, 953.29) = 1.54, p < .05$). Convention dictates that canonical correlations of less than 10% are not interpreted even if statistically significant (Tabachnick & Fidell, 1989; Thompson, 1984). They are presumed to be a statistical artifact (sample size), and not substantively meaningful. Accordingly, this second canonical correlation was not interpreted.

The results in Table 15 for the 10 variable analysis (without any ACOR variance) also showed a similar pattern to the 11 variable/total sample analysis. That is, again only the first canonical correlation was significant (21% variance), $F(25, 997.08) = 3.51, p < .05$, and the pattern among the correlations and coefficients remained the same. Thus it

would appear that removing ACOR did not alter the pattern of results, it simply reduced the proportion of variance explained (44% to 21%), and increased the importance of the Rehabilitation scale (Beta .17 to .68).

The final set of analyses were a series of individual regression equations for each work outcome using the six attitude variables employed in the CA. These can be viewed as post hoc type analyses as they provided more specific details on the relationship between the attitude variables and each work outcome. The Custody and Punitive scales were not included in these analyses for reasons of multicollinearity¹⁵. However, regressions were performed on work outcome variables that had been eliminated in the CA (i.e., General Job Satisfaction, Citizenship) as within this context, they were viewed independently. For each work outcome, the regression was performed using 2 approaches: first, all variables were able to enter at once; second, ACOR was forced to enter last. The second approach was designed to assess the incremental effect of ACOR, over and above all other attitude variables.

Table 16 provides the results for both approaches, and indicates that type of regression technique had minimal effect on the total proportion of variance explained. With Growth Satisfaction, for example, the free entry approach yielded a total R^2 of 33.1% and the forced entry method an R^2 of 33.5%. Further, when variables were free to enter in any order, generally ACOR and Rehabilitation emerged as the primary variables. When ACOR was forced into the equation last, Rehabilitation usually entered first

¹⁵ Readers interested in viewing the regression equations with Custody and Punitive included are referred to Appendix G. Overall the results were similar to that reported here.

Table 16. Cumulative proportion of variance for stepwise regressions using 6 correctional attitude variables.

Work Outcome	Free Entry				ACOR Forced Last			
	Step	Variable	B	Cum.R ²	Step	Variable	B	Cum.R ²
GenSat	1	ACOR	.54	29.5	1	Rehab	.05	6.1
					2	Counsel	.07	8.2
					3	HS	.02	10.0
					4	ACOR	.54	30.0
Growth	1	ACOR	.48	31.3	1	Rehab	.13	15.8
	2	Rehab	.16	33.1	2	Distance	-.08	17.8
					3	ACOR	.46	33.5
WStress	1	ACOR	-.33	10.8	1	Counsel	-.10	4.8
					2	Corrupt	.08	6.8
					3	ACOR	-.27	12.8
OrgCom	1	ACOR	.64	40.3	1	Rehab	.06	13.1
					2	HS	.02	15.6
					3	ACOR	.60	40.7
JobPerf	1	ACOR	.20	4.3	1	Rehab	.18	3.2
Citizenship	1	Rehab	.26	6.8	1	Rehab	.26	6.8
ITurnover	1	ACOR	-.16	2.5	1	ACOR	-.16	2.5

Note:

$p < .007$ as corrected for family-wise error rate.

B's (Beta coefficients) reported are those attained in the last step.

Cum.R² is the cumulative proportion of variance (%).

followed by another variable and then ACOR added incremental variance. More specific findings are described below.

For General Job Satisfaction using the free entry method ACOR was the only significant predictor and it explained 29.5% of the variance ($F(1,431) = 180.54, p < .007$). When ACOR was forced in last, Rehabilitation, Counseling, and Human Service entered the equation, but then ACOR increased the proportion of variance explained by an additional 20.0% to yield virtually the same total proportion of variance (30.0%) ($F(4,428) = 45.82, p < .007$).

Using the free entry method for Growth Satisfaction, ACOR entered first but Rehabilitation added incremental variance ($F(2,431) = 106.66, p < .007$). With the second method, Rehabilitation and Social Distance were significant contributors to the prediction, and again ACOR increased the proportion of variance by an additional 15.7% to yield an equivalent total R^2 (33.1% vs 33.5%) ($F(3,430) = 72.33, p < .007$).

For Work Stress and Organizational Commitment, ACOR was the sole predictor using the free entry method ($F(1,432) = 52.28, p < .007$ and $F(1,432) = 292.11, p < .007$ respectively), but other variables were able to enter when ACOR was forced in last ($F(3,430) = 20.95, p < .007$ and $F(3,430) = 98.38, p < .007$ respectively). With the latter method, for both work outcomes ACOR substantially increased the proportion of variance explained and brought the total R^2 to a level similar to the free entry method.

For Job Performance, Citizenship, and Intention to Turnover, regardless of the method used, less than 7% of the variance was explained using the correctional attitude measures. ACOR remained the only significant predictor of Intention to Turnover,

regardless of the regression method employed (both methods $F(1,429) = 11.02, p < .007$).

In contrast, only Rehabilitation significantly predicted Citizenship (both methods $F(1,279) = 20.38, p < .007$). Finally for Job Performance, ACOR entered using the free entry method ($F(1,278) = 11.76, p < .007$), but only Rehabilitation entered with the forced entry method ($F(1,278) = 9.31, p < .007$).

Discussion

The goal of the present study was to examine, in a Canadian sample of correctional workers, the level of support for certain correctional attitudes, and more importantly, the relationship between correctional attitudes and a set of work variables. A range of front-line staff were assessed, and a variety of correctional attitude measures were incorporated into the research design. The backdrop for this study was an organization that promotes a rehabilitative approach to offender management. Results from each set of analyses are discussed separately and then more global issues are addressed.

Correctional Attitudes - Level of Support

On the basis of person-environment fit, and previous literature including research conducted by the correctional jurisdiction under study, it was hypothesized that subjects would more strongly support Rehabilitation, a Human Service approach, a Counseling Role, and hold positive Attitudes Towards Correctional Work, than they would support Custody, Punitive conditions, Social Distance, or Concern with Corruption of Authority. This hypothesis was confirmed for 7 of the 8 correctional attitude scales. The exception was the Concern with Corruption of Authority scale for which 58.7% of the sample was more concerned than not with this issue. Overall, given the organization's philosophy, the data for front-line staff were encouraging. Never-the-less, improvement is still needed as 25% of the sample, for example, did not agree with a Rehabilitation orientation, and approximately 35% agreed with a Custodial orientation and Punitive prison conditions.

The second hypothesis of occupational group differences was confirmed by the series of ANOVA's for each correctional attitude measure. Post hoc comparisons across occupational groups indicated that the least rehabilitative, human service oriented staff were Correctional Officers and Line staff, but even these group means were on the positive side of each Likert scale (except Concern with Corruption of Authority). Nevertheless these data indicate that the organization could at least target Correctional Officers and Line staff for staff development, education, and pre-employment screening. These issues are discussed in more detail later.

Relationship between Correctional Attitudes and Demographics

The correlational analyses examining the relationship between correctional attitudes and individual characteristics yielded varying results. Variables with the strongest associations were Education and Gender. Recall that education was the primary variable American Correctional jurisdictions used in an attempt to increase the rehabilitative ideal in their prisons. In contrast to previous research, the present study found Education was substantively and statistically associated with most correctional attitudes. One possible explanation for this contrary finding is a cultural difference between Canadian and American samples; unfortunately this hypothesis was not testable within the scope of this study. Another plausible explanation is that it reflects sampling differences (i.e., all front-line staff vs. Correctional Officers only). In support of this perspective, correlations run only on the Correctional Officer group in this study were substantially lower (range .00 to .16) and were consistent with previous American

research. Together these findings support previous research (e.g., Jurik, et al., 1987) that indicates selection of Correctional Officers on the basis of education is unlikely to produce marked increases in rehabilitative perspectives. Even with the current sample (i.e., various front-line occupational groups), the magnitude of correlations suggest that using education as a proxy for correctional attitudes is unwise.

For Gender, the current study found significant associations for the traditional rehabilitation/custody dimension and more global correctional and human service aspects. These correlations decreased in magnitude when only Correctional Officers were examined (range $-.01$ to $.28$), so again occupational group may be interacting with this demographic variable to produce an effect. Previous correctional literature was inconclusive in its findings (see Appendix B) on gender.

The results for Age indicated a poor relationship with the traditional rehabilitation/custody dimension but stronger association with more specific attitude measures such as Social Distance, Concern with Corruption, and a Human Service approach. These results yielded a slightly stronger average effect size estimate across attitude measures ($X_r = .13$) than was found with previous research ($X_r = .08$ - see Appendix B).

Years of Service, which has yielded mixed effects in the literature, revealed only one significant relationship (Concern with Corruption of Authority). Similar to past research almost 70% of the measures obtained correlations $\leq .10$. Overall, it would appear that, with this sample, Years of Service was unrelated to correctional attitudes. The one exception indicated that those with more experience were less concerned with the

possibility of corruption of authority than less experienced employees. This may reflect greater confidence in one's own abilities over time.

Overall, the results with respect to demographic variables were consistent with previous research. Further, it appears that occupational group may have influenced the magnitude of some of these relationships. This is not surprising given that narrowing the scope to any one group of front-line workers would decrease variability. Last, the magnitude of these correlations (i.e., [.01 to .35]) supported previous research findings that suggest using any of these variables as a proxy for an individual's correctional attitudes would be unwise.

Relationship between Correctional Attitudes and Work Outcomes

There is a dearth of literature examining the presence and nature of relationships between correctional attitudes and other staff work variables. A fundamental goal of the current research was to explore this issue. Based on the notion of Person-Environment-Fit and limited empirical data, basic hypotheses were derived for each work outcome. Due to the lack of research in this area, more complex hypotheses could not be proposed. The current results addressed the basic hypotheses, shed light on more complex relationships, and served as a basis for future research.

As expected, the correlational, canonical, and regression analyses revealed a similar pattern of findings, but each analysis provided a slightly different perspective on the data. This section begins with a discussion of the findings as they relate to the proposed

hypotheses and continues with an examination of the more complex findings and their implications.

Job Satisfaction was hypothesized to show a weak positive association with favourable correctional attitudes and a weak negative association with unfavourable correctional attitudes. Recall that based on the literature reviewed, the average effect size estimate was .09. Some variation in the magnitude of these relationships was expected across attitude scales given the pattern of results from extant research. Results of the present study found much stronger correlations for both General Job Satisfaction ($X_r = .24$) and Growth Satisfaction ($X_r = .35$).

One plausible explanation is the sampling of a variety of front-line staff in the current study versus past research which focused only on Correctional Officers. The data, however, do not support this explanation. Average effect size estimates for the Correctional Officer subsample were not substantially different (General Job Satisfaction $X_r = .23$; Growth Satisfaction $X_r = .32$). Additionally, a comparison of individual correlations for the Correctional Officer group versus the total sample, showed that approximately 69% of the correlations did not substantially change in magnitude¹⁶, 6% increased, and 25% decreased. Thus, it would appear that the total sample findings are reasonably applicable to the Correctional Officer subsample.

Alternative explanations for these findings include: use of different attitude and job satisfaction measures, and organizational differences. The first hypothesis was

¹⁶ The cut-off criterion for no change was a difference in magnitude of .05 or less.

untestable given the diversity of measures used across past research. However, it is interesting to note that correlations of similar magnitude were obtained by Jurik and her colleagues (Jurik & Musheno, 1986; Jurik, et al., 1987) in the Department of Corrections' flagship rehabilitation oriented prison, lending some credence to the suggestion that perhaps stronger correlations emerge in organizations that explicitly state their goals. Never-the-less, it remains unclear why the present correlations were more consistent with Jurik's research than other studies.

Organizational Commitment was hypothesized to be positively associated with favourable correctional attitudes and negatively associated with unfavourable correctional attitudes. This hypothesis, based primarily on extrapolation from the Organizational literature and the current organization's goals (person-environment-fit), was supported by the data. All correctional attitude variables were significantly associated with Organizational Commitment in the hypothesized direction. It would appear that an organization that promotes a rehabilitative/human service approach with offenders has as it's most committed staff those who share similar goals and beliefs about offender management.

It was also hypothesized that favourable correctional attitudes would be associated with job behaviours such as Job Performance and Citizenship. Support was found for 5 of the 8 Job Performance correlations and 7 of the 8 Citizenship correlations. This is particularly noteworthy as the attitude variables and job behaviours were derived from different sources indicating a connection between staff correctional attitudes and supervisory judgements of performance. In general then, rehabilitative oriented staff were

perceived by their supervisors to be better performers than those who did not have favourable correctional attitudes. One exception was the Human Service variable which was not associated with either performance based measure. This was somewhat surprising, particularly for Citizenship which reportedly has altruism as one of its main dimensions.

Work Stress was hypothesized to have a positive association with unfavourable correctional attitudes and a negative relationship with favourable correctional attitudes. The data supported this hypothesis in that all correctional attitude scales were significantly associated with Work Stress and in the expected direction. The results were consistent with previous British research (Rutter & Fielding, 1988). They also provided indirect support for the person-environment fit model as proposed by McMicheal (1978) which suggests that an individual's reaction to work is in part influenced by his/her current attitudes, and thus stress involves an interaction between the work environment and an individual's reaction to it.

Intention to Turnover was hypothesized to be negatively associated with favourable correctional attitudes and positively associated with unfavourable attitudes. This was the one hypothesis that was not supported by the data with only 1 correlation exceeding $r = .10$ (ACOR $r = -.16$). This finding was consistent with Teske & Williamson's (1979) data on turnover intention and with previous research conducted by the correctional jurisdiction under study on actual turnover in Correctional Officer recruits (Plecas & Maxim, 1991). Interestingly, it was inconsistent with Jurik & Winn (1987) which most closely matched the operational definition used in the present study, and was

counter to that which would be expected within the context of Person-Environment-Fit. No substantial change in the pattern of correlations was observed when only the Correctional Officer group was examined. One possible contributing factor may be the low base rate for this behaviour in that only 12.3% of the sample had applied for a job outside the organization (see Appendix F). This in itself is interesting and counter to previous correctional findings of turnover intention (Jurik & Winn, 1987) and actual turnover (Hahn, 1996) which are generally higher.

Overall, the intention to turnover findings may indicate a tolerance within the organization for unfavourable attitudes, or they may reflect a weak labour market. Neither hypothesis was tested within the scope of this research, but certainly at the time of this study there was a public perception that jobs were limited and people were fortunate to have a job. Replication of this finding in other samples and across general job market fluctuations are needed to more clearly elucidate why this finding has emerged. Asking rehabilitative and custodial oriented staff why they are/are not considering leaving the organization would also assist in clarifying this issue.

The series of individual regression analyses provided an opportunity to examine the role of each attitude variable for each work outcome. Overall the findings indicate that the attitude variables explained a substantive proportion of variance in Organizational Commitment, Growth, and General Job Satisfaction. More moderate variance was explained for Work Stress, and minimal variance was explained for Citizenship, Job Performance, and Intention to Turnover. These findings suggest that inclusion of attitude variables in prediction equations for Commitment, Growth Satisfaction, General Job

Satisfaction, and Work Stress may be fruitful in future correctional research, but inclusion in equations for the remaining outcomes would likely have a minor impact.

In terms of relative contribution within these regression equations, ACOR was the predominant predictor of most outcomes and its absence markedly reduced the proportion of variance explained in the satisfaction measures, Organizational Commitment, and Work Stress. Rehabilitation was also a significant predictor, but showed most of its power when ACOR was forced in last. This pattern of results suggests some overlap between the ACOR and Rehabilitation scales, although their respective uniqueness is also evident in outcomes such as Citizenship and Intention to Turnover. All other attitude measures made significant contributions to at least one regression equation suggesting they each may have relevance to a specific work outcome. Together, the regression results suggest that general correctional attitudes may be the best predictors of staff work outcomes, but more specific correctional attitudes (e.g., Counselling, Concern with Corruption, Social Distance) could be used to provide incremental variance.

The series of canonical analyses were fairly consistent in terms of the number of interpretable canonical correlations, their magnitude, and the pattern of loadings. Cross-validation supported the notion of stable findings and strengthened confidence in the solution. Minor variations, however, were noted with some of the less important variables.

Although previous canonical analyses have not been conducted on the correctional attitude - work outcome association, explaining 44% of the variance is considered substantive (Tabachnick & Fidell, 1989). Further, the magnitude of the canonical

correlation was similar to previous canonical analyses in other domains (e.g., Brown, 1994; Wingard, et al., 1979).

The general pattern of results indicating one significant and interpretable canonical correlation suggested general attitudes about offenders, correctional work, and rehabilitation were associated with commitment to an organization, and feelings of satisfaction with one's opportunities to grow and develop in that environment. In other words, ascribing to this organization's mission statement (positive staff-offender interaction & rehabilitation) clustered with generally positive views of the organization and one's job. Clearly attempts to 'professionalize' in American correctional jurisdictions did not produce similar findings (Jurik & Musheno, 1986). The emergence of this clustering with the present sample of front-line staff is a very positive indicator for the correctional jurisdiction under study as its most committed and content staff appear to be those with views consistent with the organization's mission statement.

Study Limitations and Strengths

This study's findings are limited primarily in two respects. First, given the cross-sectional design, the causal relationship between correctional attitudes and work outcomes was not investigated. Second, the generalizability of these results may be limited to organizations with similar philosophies. Both limitations can be addressed by future research and are discussed later.

Despite these limitations, confidence in the study's findings were gleaned from two aspects of the research: the multi-source approach to data collection, and the Social

Desirability findings. In terms of the approach to data collection, certain attitude and outcome variables were measured using multiple sources such as: parallel forms for self-report versus supervisory-report; self-report measures versus interviewer ratings; and self, other's reports, versus official documentation. Results generally indicated strong to moderate correlations between these sources, thus bolstering confidence in the data for those variables.

The second observation that placed confidence in the data was the lack of association between the social desirability measure and all correctional attitude measures. Thus although the organization under study espoused certain beliefs about rehabilitation, human service, etc., it appears that subjects did not respond to the attitude measures in a manner that placed them in a favourable light. It is also noteworthy that no Social Desirability - work outcome relationship was substantive with the exception of Organizational Commitment which yielded an r of .19. Together the magnitude of the multi-source correlations, and the lack of association between Social Desirability and most measures of interest suggest confidence in the data is warranted.

Implications and Future Research

Overall, the current results have yielded practical, empirical, and theoretical implications. In practical terms, this research has implications for organizational policy, staff training, and staff selection. As discussed earlier, there does appear to be consistency between this organization's mission statement and existing staff attitudes. That is, most staff viewed inmates and correctional work in a positive light. Moreover, these attitudes

were linked to staff work outcomes, although the degree of relationship varied across outcome and attitude measures.

Pragmatically these findings should be encouraging to the correctional jurisdiction under study as they suggest the organization's principles have transcended down the ranks and that, at least to a certain extent, the work environment reflects these beliefs.

Otherwise, rehabilitative staff would have been more stressed, less committed etc.. This is an important finding as organizationally this is not always the case. Wener and Olson's (1980) research on the impact of environmental change on inmate and staff attitudes, for example, found improper implementation of primary organizational goals was the source of many operational difficulties. This illustrates that although the present study was conducted at the individual level of analysis, it is incumbent upon the organization to ensure that organizational level variables (e.g., policies, structure, etc.) are conducive and consistent with its major goals. Thus, despite these positive results, the organization under study should remain vigilant about its role in ensuring the present consistency.

Within a larger context these results blend with existing research on the positive effects of certain correctional attitudes on inmate outcomes. Together they indicate that organizationally a rehabilitative perspective has links to positive inmate and staff outcomes. In the more crisis driven context which corrections often operates, the alternative viewpoint is that, within this type of environment there does not appear to be any negative effects of staff holding favourable correctional attitudes. This suggests a win-win situation for correctional organizations, their staff, and offenders. These findings lend further credibility to a rehabilitative/human service approach to offender management

and serve as a challenge to provincial and American correctional systems that are beginning or continue to push for punitive/custodial conditions. Future longitudinal research could examine the relationship among correctional staff attitudes, staff work outcomes, and inmate outcomes.

Although the results of this study are generally positive, they do suggest areas of improvement for staff training and selection. Two groups that may warrant additional staff training in the area of correctional attitudes are Correctional Officers and Line Staff. Both groups interact with offenders formally and informally throughout the day; a positive orientation on their behalf would reinforce/support skills learned in treatment, and some would argue is essential for generalization of skills. Prospective employees could be screened for their views on offenders and offender management, thus eliminating extremist views. As illustrated in previous studies, punitive attitudes can predominate a correctional environment (Zimbardo, 1973) and may sabotage rehabilitative efforts (Cressey, 1958). With existing staff, educative and staff development programs could improve some staff's attitudes. It is important to note that the general attitude literature suggests that attitude change is more likely with those who hold more moderate views (Eagly & Chaiken, 1993), thus the most amenable individuals would be those who's scores were slightly negative to neutral. Alternative, high intensity approaches might be necessary for current staff holding more extremist views.

An issue that becomes apparent is what is an acceptable level on these measures or, more generally, in these correctional attitude domains. Although part of this answer may depend on the organization's goals, even within a rehabilitative organization, it is

apparent that having all staff attain 100% on the favourable correctional attitude measures and 0% on the unfavourable attitude measures is not necessarily desirable. For example, perhaps some skepticism or concern with the potential for corruption of authority is warranted when dealing with offenders. Similarly, having all staff interested in a counseling role is not essential. Thus, certain correctional attitudes may not be a critical for specific occupation groups, but minimally an interest in working with offenders and a belief in rehabilitative ideals would be desirable in a rehabilitative environment.

Endorsement of these latter two correctional attitudes would at least increase the likelihood that offenders would be treated fairly, frankly, and sincerely, that they would be reinforced for using prosocial and problem-solving behaviours, and that they would be referred to specialized staff for treatment/counseling needs. These types of characteristics and behaviours are precisely those that the correctional literature has shown to influence recidivism rates (e.g., Andrews & Kiessling, 1980; Glaser, 1964). Future research could establish cut-off scores on these measures to correspond with positive staff and inmate outcomes.

From an applied perspective, one concern generated by the results was the poor ability of the attitude variables individually and as a set to predict Intention to Turnover suggesting that, in this sample, correctional attitudes had little or no relationship to intention to leave the organization. This is an important organizational issue as it would be preferable to have those with unfavourable correctional attitudes more intent on leaving the organization than those with favourable attitudes. It should be noted that this research did not assess the connection between correctional attitudes and actual turnover, but

previous research (Plecas & Maxim, 1991) within this organization found no association between correctional attitudes and actual turnover. Future research could examine the relationship between correctional attitudes, intention to turnover, and actual turnover in a front-line sample now that the organization's mission statement has been in place for a more extensive period of time.

The moderate to weak association between correctional attitudes and Job Performance may also be of practical concern from a management perspective. The general nature of this performance measure (i.e., effort, efficiency, quality, and task focus), however, may have limited its sensitivity. Future research could examine this attitude - behaviour relationship by using more specific job performance indices (e.g., consoling a distraught inmate, problem-solving with an inmate). Incorporation of these types of measures could help delineate whether correctional attitudes translate into behavioural manifestations of such beliefs. This is a critical issue as ultimately, staff behaviour is a benchmark for organizational success and contributes to offender success.

Empirically this research contributed to the correctional literature in a number of unique ways. This included the examination of a variety of correctional attitude measures using the same sample, assessment of the attitude - work outcome relationship, and inclusion of a range of front-line staff.

In the area of attitude measurement, the current study utilized established measures and developed new ones. One salient finding across the correlational, canonical, and MR analyses was the magnitude and relative importance of ACOR. This is an intriguing finding given that the measure was developed for this study. The regression analyses, as

reported earlier, indicate some overlap between ACOR and Rehabilitation, although the power of ACOR to add incremental variance was striking. Factor analysis on ACOR and subsequent correlations between factor scores and work outcomes did not support the belief that there is content overlap between ACOR and the work outcomes, as all 3 factor scores generally yielded correlations of similar magnitude with each work outcome¹⁷.

Unfortunately these analyses did not provide any insight into what aspect of this measure is so critical. Future research is warranted on this measure including: replication of the psychometric findings, exploration of its predictive utility with respect to staff and inmate outcomes, and discrimination of the salient aspects of this variable.

The suppressor effect of Concern with Corruption of Authority in the CA was also noted; it enhanced the importance of other attitude variables by its suppression of irrelevant variance. When partial correlations were computed between attitude and work outcomes controlling for this variable, correlational decrements of .10 or greater were obtained for Social Distance (with Growth, Work Stress, Citizenship, & Job Performance), and Human Service (with Growth, & Work Stress). Perhaps its shared variance primarily with the Social Distance and Human Service scales explains why it was a suppressor variable.

The overlap across the Rehabilitation, Custody, and Punitiveness scales suggest that future research may only require the inclusion of one of these measures. The pattern of data for the remaining attitude variables suggests they are distinct and that a

¹⁷ The one exception was the larger correlation between ACORF2 and Intention to Turnover ($r = -.18$) in comparison to ACORF1 ($r = -.09$) and ACORF3 ($r = -.06$).

multidimensional perspective of correctional attitudes, as advocated by others in the field (e.g., Jurik & Musheno, 1986) is valid.

Empirically, this research also clarified that different occupational groups vary on their views of inmates and correctional work, but it also indicated that their views are not as discrepant as some might expect. Consistent with previous research (e.g., Peretti & Hooker, 1976; Poole & Pogrebin, 1988), these findings challenge the belief that correctional officers/guards are 'hacks' or 'screws'. Future research could consider including a broad range of front-line staff, rather than focusing exclusively on guard staff.

Finally, certain aspects of this research have empirical and theoretical implications. First is the emergence of a single CA solution which included most variables. This suggests the variables on each side are interrelated and that a macro approach is warranted in future research. It also indicates that any proposed theory be able to account for this interconnectedness. To aid in the development and integration of a theoretical perspective in this domain, longitudinal and experimental research is required to help elucidate the causal relationship between correctional attitudes and staff outcomes.

Conceptually the current findings suggest that, although most correctional attitude measures may not be major predictors of staff work outcomes, they do play a role particularly for Organizational Commitment and Satisfaction. Within a larger context, future organizational research may want to consider specific 'organizational attitudes' in their models. These attitudes may provide a contextual element that appears to have been neglected in organizational research. Analogous to 'job attitudes' (i.e., task identity, task focus, autonomy, etc.) which assess beliefs about the job, 'organizational attitudes' could

relate to the specific nature of the organization. In the organization under study, for example, correctional attitudes were key to the business of correctional work. Similarly in companies that pride themselves on customer service, attitudes such as a human service perspective, and an interest in problem solving might be relevant. Thus, when attempting to predict turnover, for example, these types of variables could be considered for inclusion in the model. Typically these types of variables have been omitted with only standard variables such as demographics, satisfaction, commitment etc. considered (e.g., Blau & Boal, 1989; Lance, 1991; Williams & Hazer, 1986). Limited research has included person - job congruence (e.g. Stumpf & Hartman, 1984), and other research has considered personality traits relevant to a specific job/task, but what is being proposed here is a more specific assessment of the match between the individual's and organization's values, and the role that match plays in influencing work outcomes. Based on the current findings, inclusion of general attitude variables (i.e., Attitudes about Correctional Work, Rehabilitation) in these predictions would likely be more promising than inclusion of specific correctional attitude measures (i.e., Counselling Role, Social Distance, Concern with Corruption of Authority).

Finally, the current results provide indirect support for the P-E Fit perspective in that individuals with attitudes similar to the organization are the most committed and content. Where it is not supportive is in its failure to show an association between these attitudes and intentions to leave the organization. The P-E Fit perspective could be explored further through a replication involving an organization that explicitly promotes a custodial approach to offender management. Consistency between staff and

organizational attitudes in that setting could converge with the present findings to demonstrate person - environment matches and their association with work outcomes.

In summary, this study has served as a base and point of departure for future work. It has expanded the scope of consideration from simply descriptive information on staff attitudes and prediction of attitudes from demographics to a better understanding of the inter-relationships among existing attitude measures and their association with staff outcomes. Overall, the project has provided a glimpse of the role correctional attitudes play in the lives of staff, but substantial work remains to be done. Given the importance of front-line staff to the business of offender management, a concerted and continuous research agenda in this domain could benefit offenders, the organization, and staff.

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Appendix A

A model for conceptualizing social service intervention. (From "A model for conceptualizing interventions in social service agencies" by R.D. Hoge and D.A. Andrews, 1986, *Canadian Psychology*, 27, p. 335. Reprinted by permission)

Appendix B

Demographics associated with Correctional Attitudes¹⁸

The second largest segment of correctional attitude research has involved the prediction of attitudes and simple bivariate associations with demographic variables. In a narrative review of the literature, Philliber (1987) separates common variables of interest into two sets: individual characteristics (e.g., age, gender), and organizational conditions (e.g., role conflict, work shift, supervisor support). Frequently examined individual characteristics include: age, years of service, gender, education, and race.

A. Individual characteristics

Studies on chronological age have obtained conflicting results. Four studies (Klofas, 1984; Shamir & Drory, 1981; Teske & Williamson, 1978; Toch & Klofas, 1982) have found older officers more positive towards treatment programs, rehabilitation, and a human service approach. Yet, using other measures, no effect has been reported (Jurik & Musheno, 1986; Shamir & Drory, 1981), or the opposite effect (Jurik, Halemba, et al., 1987). Based on the data reported in these studies, the average correlation was $r = .08$ with 75% of the correlations falling below .15.¹⁹

¹⁸ This review is comprehensive but not exhaustive, thus average/mean effect size estimates are based on available data. A complete literature search and subsequent meta-analysis on each variable in this section was beyond the scope of this study.

¹⁹ Eight data points were used to derive this average effect size estimate. The Jurik studies (1986;1987) provided two, Shamir & Drory (1981) two, and Klofas (1984) four.

A frequent confound of age is years of service. Of nine measurements of the service - attitude relationship, five reported non-significant findings (Hepburn, 1984; Jurik, Halemba, et al., 1987; Jurik & Musheno, 1986; Shamir & Drory, 1981), two a significant negative association (Hepburn, 1984; Teske & Williamson, 1979), one a significant positive association (Toch & Klofas, 1982), and one that results varied across gender (Crouch & Alpert, 1982). From this set of studies, seven correlations yielded an average effect size estimate of $r = .01$; 71% of these values were less than $r = .10$. As the narrative review suggests, there was a wide range in the data (-.11 to .14).

To separate the effects of age and seniority, age of entry has been examined. This line of research has been somewhat restrictive as it has only reported age of entry as a variable in a prediction equation for attitudes. Never-the-less, the role age of entry plays in relation to other variables provides some indication of its power as a contributing variable. Whitehead and Lindquist (1989) found age of entry to be a non-significant predictor of counselling, punitiveness, and concern with corruption, but a significant predictor of social distance with older entrants preferring less social distance from inmates. Cullen, et al. (1989) reported that age of entry was not a significant predictor of a custody orientation, however, it was a factor in predicting a rehabilitative orientation, again with older entrants more supportive of a rehabilitative approach. Concomitantly, years of service was not a significant predictor of any of the six correctional attitudes measured (Cullen, et al., 1989; Whitehead & Lindquist, 1989). Together, this literature suggests that age of entry is not associated with correctional attitudes. If a relationship exists with age, it is likely weak and positive in direction.

Level of education is another frequently considered variable. As outlined earlier, the American correctional system assumed that more educated individuals held more positive attitudes towards inmates, rehabilitation etc.. The empirical literature, however, does not show overwhelming support for this position. Five evaluations of the education - attitude association found no significant relationship between these two variables (Hepburn, 1984; Jurik, Halemba, et al., 1987; Jurik & Musheno, 1986; Shamir & Drory, 1981), while three reported the popular expectation (Hepburn 1984; Teske & Williamson, 1979). For studies reporting actual data, the average correlation was .05 with a range of .17 to -.04 (based on 7 correlations).

The role of gender has also been contentious (Zimmer, 1987). Some propose that the presence of female guards in prisons softens the aggressive, masculine environment (Shawver & Dickover, 1986; Alpert, 1984). Implicit in this view is the belief that women are less punitive oriented, more inter-personally oriented, and more concerned about inmate emotional well-being (Shawver & Dickover, 1986, Zupan, 1986). Szockyj (1989) interviewed male and female guards, inmates, and supervisors in a western Canadian provincial institution. That research found female correctional officers were better communicators and diffusers. As well, they appeared more attentive to minor issues that made a difference to inmates. Though no formal data were gathered on correctional attitudes, that description would suggest a less custodial and less socially distant approach to corrections on behalf of females. In contrast, Zupan (1986) assessed the perceptions of inmates, and male and female custodial staff regarding inmate needs. For staff, strong similarities across gender were obtained on these measures. Male and female guards were equally poor at identifying inmate needs²⁰. Summary

²⁰ For example, inmates ranked support as the most important inmate need, whereas

of the literature reveals three studies supporting the null hypothesis of no gender difference (Jurik, Halembe, et al., 1987; Jurik & Musheno, 1986; Zupan, 1986), and three supporting the belief that females hold less custodial views (Crouch & Alpert, 1982; Szockyj, 1989; Walters, 1992). These varied findings suggest it is questionable to assume women bring certain sex-specific attitudes to the correctional environment.

Race has also been hypothesized to influence correctional attitudes. The American correctional system in the 1970s sought to hire more minority guards as a method of bridging a perceived cultural chasm between white guards and black inmates. Recruitment of black staff was intended to bring a less punitive and more humanitarian approach to the prison environment (Jurik, 1985). Jacobs and Kraft (1978), however, found minority guards were more punitive than whites. Others have reported no attitude difference across race (Jurik, Halembe, et al., 1987; Jurik & Musheno, 1986; Klofas, 1986).

Little research has been conducted on other variables such as previous military or law enforcement experience. Teske and Williamson (1979) found that a positive view of treatment was associated with previous military experience, but not law enforcement or correctional experience. Other research (Jurik, Halembe, et al., 1987) has indicated prior law enforcement experience was associated with less punitive attitudes ($r = -.15$).

B. Organizational conditions

Organizational level variables have also been explored for possible association with correctional attitudes. These include: rank, degree of inmate contact, level of institutional

male and female staff ranked it sixth out of a possible eight needs. Similarly, male and female staff ranked safety as the number one inmate concern, but inmates ranked this need fourth.

security, and work shift. With respect to rank, results appear equivocal. Teske and Williamson (1979) report lower ranked officers viewed treatment programs more positively. Shamir and Drory (1981) found non-significant results when assessing guards attitudes towards rehabilitation potential of prisoners ($r = .01$). When looking at attitudes regarding the supportive role of guards, however, higher ranked officers held more positive views ($r = .19$). These conflicting results may reflect different definitions of correctional attitudes measured, or interactions with other variables such as age or inmate contact.

Research on degree of inmate contact found that four measures of the contact - attitude relationship were non-significant findings ($r = -.04$ to $.00$) (Hepburn, 1984; Jurik, 1985; Shamir & Drory, 1981). Two of these studies (Hepburn, 1984; Shamir & Drory, 1981) also reported a positive association between increased contact and attitudes pertaining to emotional support ($r = .14$ and $r = .15$).

Two studies were found in the literature that examined the role of level of security. Smith and Hepburn (1979) surveyed treatment and custody staff about their opinions of punitiveness. Data indicated staff attitudes were more punitive in minimum security facilities ($\gamma = .22$) and that relationship remained after controlling for years of service. In contrast, Jurik (1985) measured the punitive attitudes of correctional officers in institutions of varying security levels and found no significant association ($r = .07$).

Literature on the treatment versus custody role of staff has indicated that treatment staff are more rehabilitation oriented. Lindquist and Whitehead (1986) compared guards assigned to a community based case management role to institutional guards, and probation/parole officers on four correctional attitudes. Results indicated the first group

preferred less social distance from inmates, more of a counselling role, and were less concerned with corruption of authority than the institutional guards. They were also less punitively oriented than the other groups. At one year follow-up, no significant attitude change was observed for this job enriched group on any of these measures. Caution should be used in interpreting these results, as the group chosen for the community positions were not randomly selected from the institutional guard pool. Loza (1993), as described earlier, found a differential level of support for rehabilitation across staff groups with treatment staff holding more supportive views than custody staff with respect to the potential for rehabilitation of sexual offenders. Counter to these studies, Ben-David (1992) reported the presence of five types of attitudes towards staff-inmate interactions, and aside from nursing staff, no type was favoured by any occupational group. Street (1965) compared staff attitudes and behaviour under different organizational goals. It was found that staff in two treatment settings for delinquent youth held more positive attitudes towards their clients than staff in two custodial settings. No detailed comparison of staff across different job roles was explored. Last, data by Brown, Dupont, Kozel, and Spevacek (1971) suggest a more complex relationship where orientations of the institution interacts with worker duties to affect attitudes. Custodial staff from a custodial oriented institution viewed inmates as significantly more aggressive than rehabilitation staff in that institution, and custodial staff in a treatment institution. However, rehabilitation staff at the treatment facility viewed inmates as more aggressive than did custodial staff in the same institution or their treatment counterparts in the custodial setting (Brown et al., 1971). In summary, there is some support for the notion that occupational role is associated with correctional attitudes, and there is preliminary evidence that it may also

interact with institutional philosophy. Whether personal attitudes about corrections determine role choice, or whether role determines attitudes adopted about corrections remains unaddressed by these studies.

Appendix C

Rehabilitation Scale (Cullen, Lutze, Link & Wolfe, 1989)

	AGREE 1	UNCERTAIN 2	DISAGREE 3
1. All rehabilitation programs have done is allow criminals who deserve to be punished to get off easily.	1	2	3
2. Rehabilitating a criminal is just as important as making a criminal pay for his or her crime.	1	2	3
3. The only effective and humane cure for the crime problem in Canada is to make a strong effort to rehabilitate offenders.	1	2	3
4. The only way to reduce crime in our society is to punish criminals, not try to rehabilitate them.	1	2	3
5. We should stop viewing criminals as victims of society who deserve to be rehabilitated and start paying more attention to the victims of these criminals.	1	2	3
6. I would support expanding the rehabilitation programs with criminals that are now being undertaken in our prisons.	1	2	3
7. One of the reasons why rehabilitation programs often fail with prisoners is because they are under-funded; if enough money were available, these programs would work.	1	2	3
8. The rehabilitation of adult criminals just does not work.	1	2	3
9. The rehabilitation of prisoners has proven to be a failure.	1	2	3

Custody Scale (Cullen, Lutze, Link & Wolfe, 1989)

	AGREE 1	UNCERTAIN 2	DISAGREE 3
1. Keeping the offenders from causing trouble should be the major concern of correctional officers .	1	2	3
2. Many people don't realize it, but prisons are too soft on the inmates .	1	2	3
3. An inmate will go straight only when he finds that prison life is hard .	1	2	3
4. Sleep'em, feed'em, and work'em is the best way to handle inmates .	1	2	3
5. We would be successful even if all we taught inmates was a little respect for authority .	1	2	3
6. As long as inmates stay quiet and don't cause any trouble I really don't care if they are getting rehabilitated or cured while in prison .	1	2	3
7. An officer's job isn't to help rehabilitate inmates; it's only to keep them orderly so that they don't hurt anyone in there or tear the prison apart .	1	2	3

Professional Orientation Scale (Klofas & Toch, 1982)

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
	1	2	3	4
Social Distance items				
1. Staff should work hard to earn trust from offenders .	1	2	3	4
2. It's important for staff to have compassion .	1	2	3	4
3. The way to get respect from offenders is to take an interest in them .	1	2	3	4
4. You get to like the offenders you work with .	1	2	3	4
5. Sometimes staff should advocate for an offender .	1	2	3	4
Counselling Roles items				
6. Rehabilitation programs should be left to mental health professionals .	1	2	3	4
7. Counselling is a job for counsellors, not for correctional officers or other line staff .	1	2	3	4
8. If staff (other than counsellors) want to do counselling, they should change jobs .	1	2	3	4
Punitive Orientation items				
9. There would be much less crime if prisons were more uncomfortable .	1	2	3	4
10. Improving prisons for inmates makes them worse for staff .	1	2	3	4
11. A military regime is the best way of running a prison .	1	2	3	4
12. Rehabilitation programs are a waste of time and money .	1	2	3	4

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
	1	2	3	4
Concern with Corruption of Authority items				
13. You can't ever completely trust an offender .	1	2	3	4
14. A good principle is not to get 'close' to offenders .	1	2	3	4
15. A personal relationship with an offender invites corruption .	1	2	3	4
16. You must keep conversations with offenders short and businesslike .	1	2	3	4
17. If staff are lenient with offenders, they will take advantage of them .	1	2	3	4

Attitudes Towards Correctional Work (developed for this study)

	FALSE 0	TRUE 1
1. For good reasons, the type of work we do in corrections has a bad image with the public.	0	1
2. One of the most rewarding elements of correctional work is that it is challenging.	0	1
3. If I had the choice, I'd much prefer to work with non-offenders than with offenders.	0	1
4. If it wasn't for the good pay, I would probably not choose a career in the field of corrections.	0	1
5. While every job has its rewards, offenders are the most interesting and challenging type of people to work with.	0	1
6. In general, there are more good things than bad things about having a career in corrections.	0	1
7. Being involved in the field of corrections gives me a personal sense of pride and accomplishment.	0	1
8. Usually, I am not very proud to tell people that I earn my living working with criminals.	0	1
9. Generally, I would prefer to have a job in a different field than corrections.	0	1
10. What most attracts me to corrections is the type of work I do, and not the pay, fringe benefits, or working conditions.	0	1
11. I would have to agree that work in corrections is not a very respectable kind of job to have.	0	1
12. Working in corrections would be O.K. as long as you didn't have to deal with offenders directly.	0	1

Human Service Orientation (developed for this study)

	FALSE 0	TRUE 1
1. I prefer a job that gives me the opportunity to help people solve their problems.	0	1
2. I can get a lot of satisfaction from working with people who are less fortunate than I am.	0	1
3. For me, a job that involves talking to people about their problems is more meaningful than a job that involves only casual contact with other people.	0	1
4. Work that allows me to help other people makes me feel like I am really making a difference.	0	1
5. I don't necessarily have to work with people in order to feel like I'm making a contribution to society.	0	1
6. If I was to start looking for a new career tomorrow, I'd probably look for work in one of the helping professions.	0	1
7. Administrative work is O.K., as long as it contributes to solving the major problems in society.	0	1
8. Generally, I tend to get more satisfaction from working with people than from other parts of my job.	0	1

General Job Satisfaction (Hackman & Oldham, 1974)

	VERY INACCURATE		UNCERTAIN		VERY ACCURATE	
	1		4		7	
1. Generally speaking, I am very satisfied with this job.	1	2	3	4	5	6 7
2. I frequently think of quitting this job.	1	2	3	4	5	6 7
3. I am generally satisfied with the kind of work I do in this job.	1	2	3	4	5	6 7

Growth Satisfaction (Hackman & Oldham, 1974)

	EXTREMELY DISSATISFIED		NEUTRAL		EXTREMELY SATISFIED	
	1		4		7	
1. The amount of personal growth and development I get in doing my job.	1	2	3	4	5	6 7
2. The feeling of worthwhile accomplishment I get from doing my job.	1	2	3	4	5	6 7
3. The amount of independent thought and action I can exercise in my job.	1	2	3	4	5	6 7
4. The amount of challenge in my job.	1	2	3	4	5	6 7

Organizational Commitment (Mowday, Steers, & Porter, 1979)

	STRONGLY DISAGREE	MODERATELY DISAGREE	SLIGHTLY DISAGREE	NEITHER DISAGREE NOR AGREE	SLIGHTLY AGREE	MODERATELY AGREE	STRONGLY AGREE
	1	2	3	4	5	6	7
	STRONGLY DISAGREE			NEITHER		STRONGLY AGREE	
	1			4		7	
1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.	1	2	3	4	5	6	7
2. I talk up this organization to my friends as a great organization to work for.	1	2	3	4	5	6	7
3. I feel very little loyalty to this organization.	1	2	3	4	5	6	7
4. I would accept almost any type of job assignment in order to keep working for this organization.	1	2	3	4	5	6	7
5. I find that my values and the organization's values are very similar.	1	2	3	4	5	6	7
6. I am proud to tell others that I am part of this organization.	1	2	3	4	5	6	7
7. I could just as well be working for a different organization as long as the type of work was similar.	1	2	3	4	5	6	7
8. This organization really inspires the very best in me in the way of job performance.	1	2	3	4	5	6	7
9. It would take very little change in my present circumstances to cause me to leave this organization.	1	2	3	4	5	6	7
10. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.	1	2	3	4	5	6	7
11. There's not too much to be gained by sticking with this organization indefinitely.	1	2	3	4	5	6	7

12. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees. 1 2 3 4 5 6 7
13. I really care about the fate of this organization. 1 2 3 4 5 6 7
14. For me this is the best of all possible organizations for which to work. 1 2 3 4 5 6 7
15. Deciding to work for this organization was a definite mistake on my part. 1 2 3 4 5 6 7

Job Performance (developed for this study)

UNSATISFACTORY	SATISFACTORY	FULLY SATISFACTORY	SUPERIOR	OUTSTANDING
1 -----	2 -----	3 -----	4 -----	5 -----
-
- | | UNSATIS-
FACTORY
1 | | FULLY
SATISFACTORY
3 | | OUTSTANDING
5 |
|---|--------------------------|---|----------------------------|---|------------------|
| 1. The effort he/she puts forth in meeting the objectives and goals of the job. | 1 | 2 | 3 | 4 | 5 |
| 2. The quality of his/her work. | 1 | 2 | 3 | 4 | 5 |
| 3. The amount of time he/she devotes to doing his/her assigned tasks. | 1 | 2 | 3 | 4 | 5 |
| 4. The extent to which he/she is efficient with his/her time. | 1 | 2 | 3 | 4 | 5 |

Citizenship Scale (developed for this study)

DISAGREE COMPLETELY DISAGREE PRETTY MUCH DISAGREE SLIGHTLY NEITHER DISAGREE NOR AGREE AGREE SLIGHTLY AGREE PRETTY MUCH AGREE COMPLETELY
 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7

	DISAGREE COMPLETELY			NEITHER			AGREE COMPLETELY
	1			4			7
1. He/she is punctual in arriving at work on time in the morning and after lunch and breaks.	1	2	3	4	5	6	7
2. He/she volunteers to do things not formally required by the job.	1	2	3	4	5	6	7
3. He/she has an attendance record that is better than average, for example, he/she takes less days off than most individuals or he/she takes fewer days off than allowed.	1	2	3	4	5	6	7
4. He/she helps others when their work load increases by assisting them until they get over the hurdles.	1	2	3	4	5	6	7
5. He/she coasts toward the end of the day.	1	2	3	4	5	6	7
6. He/she spends a great deal of time in personal telephone conversations.	1	2	3	4	5	6	7
7. When it is required, he/she assists the boss in doing work that is not normally part of the job.	1	2	3	4	5	6	7
8. He/she willingly attends functions not required by the organization, but which help in its overall image.	1	2	3	4	5	6	7
9. At work, he/she spends a great deal of time talking to others about topics not related to work.	1	2	3	4	5	6	7
10. He/she makes innovative suggestions to improve the overall quality of the workplace.	1	2	3	4	5	6	7
11. He/she conscientiously follows organizational rules.	1	2	3	4	5	6	7

	DISAGREE COMPLETELY			NEITHER			AGREE COMPLETELY	
	1			4			7	
12. He/she makes sure that things are neat, clean, and orderly.	1	2	3	4	5	6	7	
13. He/she tries to look busy when actually doing nothing.	1	2	3	4	5	6	7	
14. He/she co-operates well with others.	1	2	3	4	5	6	7	
15. He/she complains about a lot of little things at work.	1	2	3	4	5	6	7	
16. He/she makes constructive statements about the workplace.	1	2	3	4	5	6	7	
17. It seems that co-workers turn to him/her for help when they have questions or problems with their work.	1	2	3	4	5	6	7	
18. He/she puts forth extra effort when this work unit is in a crisis or has a deadline to meet.	1	2	3	4	5	6	7	
19. When he/she runs out of things to do, he/she looks for constructive ways to fill the time.	1	2	3	4	5	6	7	
20. He/she will stay at work a bit later to finish up a project, even if he/she is not getting paid for it.	1	2	3	4	5	6	7	
21. He/she takes off as much time as he/she can regardless of how busy we are at work.	1	2	3	4	5	6	7	
22. He/she takes home paperwork to do on his/her own time when he/she is too busy to get it done during normal working hours.	1	2	3	4	5	6	7	

Intention to Turnover (Plecas & Maxim, 1991)

1. Have you applied for any jobs in the last six months? (check all that apply).

- ☐ NO
- ☐ YES, within an institution
- ☐ YES, within C.S.C but not within an institution
- ☐ YES, outside C.S.C.

Social Desirability (Strahan & Gerbasi, 1972)

* These items were embedded in the Eysenck Empathy scale thus the wording has been changed slightly to match that scale's format (i.e. question format and response options of YES/NO rather than TRUE/FALSE).

	<u>YES</u>	<u>NO</u>
1. Are you always willing to admit it when you make a mistake?	Y	N
2. Do you always try to practice what you preach?	Y	N
3. I never resent being asked to return a favour?	Y	N
4. I have never been irked when people expressed ideas very different from my own?	Y	N
5. I have never deliberately said something that hurt someone's feelings?	Y	N
6. Do you like to gossip at times?	Y	N
7. Have there been occasions when you took advantage of someone?	Y	N
8. At times do you try to get even rather than forgive and forget?	Y	N
9. At times have you really insisted on having things your way?	Y	N
10. Are there occasions when you felt like smashing things?	Y	N

Demographics

1. Gender (circle 1 or 2): 1 Male
 2 Female

2. Date of Birth: year ____ month ____ day ____

3. Indicate your highest level of education
 - 1 grade 11 or below
 - 2 secondary or high school diploma
 - 3 some college courses
 - 4 some university courses
 - 5 community college diploma or certificate
 - 6 Bachelor's degree
 - 7 Master's degree
 - 8 Doctoral degree
 - 9 Other - please describe (e.g., trade certificate):

4. Indicate your current Job Title (e.g., Case Management Officer, Correctional Officer, Program Manager):

5. How many years have you been employed with C.S.C.? _____

Appendix D

**Understanding Correctional Staff Commitment and Aspirations:
A Research Study****INFORMATION SHEET**

This research project is a direct response to the recognition that "our strength and our major resource" in the Correctional Service of Canada is our staff. The Mission is very clear in pointing to the necessity of developing a highly motivated and committed staff if we are to achieve the objectives we have set for our organization.

However, it is also recognized that we know very little about the factors that make for a motivated and committed staff in corrections. Without this knowledge we cannot make the improvements that are necessary. This research project will provide some of the answers about what the Correctional Service of Canada can do to increase commitment and satisfaction. It will also help identify staff aspirations for making the Service a better workplace.

The consulting firm of Goss, Gilroy, and Associates have been hired to conduct the study. The firm will administer questionnaires and conduct interviews on a sample of 800 staff. The sample is designed to represent our five regions and the various occupational groups that make up the Service. Your name has been randomly selected, but of course, your participation will be completely voluntary and you may withdraw from the project at any time. Your participation or non-participation will have no consequences for your employment with the Correctional Service of Canada. Your responses to the questionnaires and interviews will be held in the strictest confidence.

Research Case Number _____

CONSENT TO PARTICIPATE

I, _____ (print your name) have been asked to take part in a study on staff commitment and aspirations. I have been given an "Information Sheet" describing the study.

I realize my participation will involve both the completion of a questionnaire and also an interview. I understand that my participation is completely voluntary, that I may refuse to answer specific questions, and that I may withdraw from the study at any time. My decision to participate or withdraw will have no affect on my position in the Correctional Service of Canada.

Any information I provide will be kept strictly confidential and nothing I say will affect my position in the Correctional Service of Canada. This form, containing my name, will be removed from my questionnaire booklet after I return it to the research staff of Goss, Gilroy and Associates. The information I give will be used for scientific purposes in order to better understand staff commitment and aspirations. My answers will be coded in such a way that I cannot be identified in any reports of the results.

My signature below indicates that I have read the above and that I agree to participate.

Date _____

Signature _____

CONSENT TO OBTAIN INFORMATION FROM IMMEDIATE SUPERVISOR

I, _____ (print your name) have been asked to participate in a study of staff commitment and aspirations. As part of this study the researchers wish to ask my immediate supervisor to complete a questionnaire about my performance. I understand that my consent to allow research staff to ask my supervisor for this information is completely voluntary, and that whether or not I consent will have no effect on my position in the Correctional Service of Canada.

I realize this information is similar to the information on performance that I have already provided in response to the questionnaires. The information will only be used for research purposes and my supervisor will not be made aware of the responses I have already given in questionnaires and interviews. I also realize that I cannot be made aware of my supervisor's responses to protect his/her confidentiality.

The information provided by my supervisor will only be used for research purposes and will be coded in such a way that I cannot be identified in any reports of the results. In the event that my supervisor consents to complete these questionnaires, the information will be returned by mail to the Research and Statistics Branch and will be marked Confidential. My name will be removed from all forms before mailing, and I will be identified by my research case number only.

My signature below indicates that I have read the above and that I agree to allow the research staff to request the information from my immediate supervisor.

Date _____

Signature _____

Name of Immediate Supervisor _____

Supervisor's Position _____

Operational Unit _____

Research Case Number _____

CONSENT TO ACCESS MY PERFORMANCE APPRAISAL

I, _____ (print your name) have been asked to participate in a study of staff commitment and aspirations. As part of this study the researchers wish to have access to my most recent performance appraisal on file. I realize this information will be remain confidential and that my consent to release the information to the research staff is completely voluntary. In addition, my decision to release or not release this information to the researchers will have no affect on my position in the Correctional Service of Canada.

My performance appraisal data will only be used for research purposes and will be coded in such a way that I cannot be identified in any reports of the results. This form, containing my name, will be removed from my questionnaire booklet after I return it to the research staff. I understand that after the information has been retrieved by the research staff, my name will not be stored in the same file with the performance appraisal information.

My signature below indicates that I have read the above and that I agree to provide the researchers with access to my most recent performance appraisal on file.

Date _____

Signature _____

Debriefing

Subjects were offered an opportunity at the end of the interview to make additional comments or ask questions. Subsequently, they were thanked for participating and were informed that they would receive a copy of the overall study results.

When the preliminary data analyses were complete, each subject received a summary of the study results. This report was written in layman's terms, and covered a broad range of topics addressed by the study. This information was also published in the organization's magazine. The Commissioner and union representatives were also debriefed on the findings.

Appendix E

Correlations between the correctional attitude factor scores and various measures.

	HSF1	HSF2	ACORF1	ACORF2	ACORF3
Correctional Attitude Variables					
Rehab	.48* (414)	.13* (409)	.39* (408)	.36* (414)	.38* (411)
Custody	-.42* (414)	-.07 (410)	-.38* (411)	-.37* (417)	-.33* (414)
Punitive	-.43* (411)	-.05 (406)	-.38* (411)	-.31* (416)	-.37* (412)
Distance	-.44* (398)	-.19* (395)	-.26* (394)	-.24* (400)	-.40* (396)
Counsel	.26* (419)	.03 (414)	.33* (416)	.26* (422)	.15* (418)
Corrupt	-.31* (409)	-.15* (405)	-.33* (405)	.26* (412)	-.24* (410)
HS	.94* (416)	.60* (416)	.30* (402)	.22* (410)	.43* (404)
ACOR	.45* (399)	.12* (412)	.82* (407)	.65* (407)	.72* (407)
Demographic Variables					
Gender	.19* (424)	.00 (420)	.14* (420)	.20* (426)	.17* (422)
Age	.19* (415)	.16* (411)	.05 (421)	-.04 (417)	.16* (414)
Education	.16* (425)	-.11* (421)	.13* (422)	.14* (428)	.20* (423)

(cont'd)

Appendix E (cont'd)

	HSF1	HSF2	ACORF1	ACORF2	ACORF3
Years Service	-.04 (426)	.03 (422)	-.09 (422)	-.11* (428)	-.05 (424)
Social Desirability	.10* (417)	.10* (414)	.08 (415)	.05 (420)	.11* (418)
Work Outcomes**					
GenSat	.24* (426)	.11 (422)			
Growth	.29* (425)	.08 (421)			
OrgCom	.30* (419)	.16* (415)			
Job Perf	.03 (274)	-.03 (273)			
Citizenship	.05 (262)	-.04 (260)			
WStress	-.14* (424)	-.06 (420)			
ITurnover	-.05 (424)	.00 (420)			

Note:

N's in brackets ()

* $p < .05$

** Correlations for the ACOR factor scores with work outcomes are reported in Table 13.

*** Within scale factor correlations were : HSF1 & HSF2 = .29* (416); ACORF1 & ACORF2 = .34* (417); ACORF1 & ACORF3 = .44* (415); ACORF2 & ACORF3 = .24* (419)

Appendix F

Descriptive statistics for each work outcome variable overall and by occupational group.

Variable	Mean	Standard Deviation	N
General Job Satisfaction			
1 Correctional Officer	4.88	1.42	201
2 Line Staff	5.44	1.02	59
3 Correctional Supervisor	5.57	.95	39
4 Case Management Officer	5.20	1.16	104
5 Professional	5.79	1.13	37
Overall	5.17	1.29	440
Growth Satisfaction			
1 Correctional Officer	3.97	1.34	201
2 Line Staff	4.91	1.02	59
3 Correctional Supervisor	4.96	1.45	39
4 Case Management Officer	4.86	1.14	104
5 Professional	5.57	1.21	36
Overall	4.52	1.36	439
Work Stress			
1 Correctional Officer	4.07	1.29	200
2 Line Staff	4.04	1.20	57
3 Correctional Supervisor	3.88	1.31	39
4 Case Management Officer	4.18	1.25	103
5 Professional	3.57	1.08	36
Overall	4.03	1.26	435
Organizational Commitment			
1 Correctional Officer	3.95	1.07	199
2 Line Staff	4.29	.95	57
3 Correctional Supervisor	4.56	.96	39
4 Case Management Officer	3.98	1.02	100
5 Professional	4.57	.97	35
Overall	4.11	1.05	430

(cont'd)

Appendix F (cont'd)

Variable	Mean	Standard Deviation	N
Job Performance (supervisor rated)			
1 Correctional Officer	3.32	.64	129
2 Line Staff	3.36	.73	44
3 Correctional Supervisor	3.27	.63	29
4 Case Management Officer	3.60	.65	77
5 Professional	3.35	.67	22
Overall	3.40	.66	301
Citizenship (supervisor rated)			
1 Correctional Officer	5.05	.91	125
2 Line Staff	5.25	1.06	43
3 Correctional Supervisor	5.25	1.10	26
4 Case Management Officer	5.64	.81	73
5 Professional	5.27	1.03	21
Overall	5.26	.96	288
Intention to Turnover			
	<u>%</u>	<u>N</u>	
1 Correctional Officer	16.5	33	
4 Case Management Officer	8.7	9	
2 Line Staff	8.5	5	
5 Professional	10.8	4	
3 Correctional Supervisor	7.5	3	
Overall	12.3	54	

Note.

For ease of interpretation, all means have been divided by the number of scale items.

Appendix G

Cumulative proportion of variance for stepwise regressions using all 8 correctional attitude variables including the Custody and Punitive scales.

Work Outcome	Free Entry				ACOR Forced Last			
	Step	Variable	B	Cum.R ²	Step	Variable	B	Cum.R ²
GenSat	1	ACOR	.61	29.5	1	Rehab	.05	6.1
	2	Custody	.31	30.9	2	Counsel	.07	8.2
					3	HS	.02	10.0
					4	ACOR	.54	30.0
Growth	1	ACOR	.48	31.1	1	Rehab	.09	15.8
	2	Punitive	-.17	33.2	2	Punitive	-.11	18.0
					3	ACOR	.46	33.6
WStress	1	ACOR	-.25	10.8	1	Punitive	.17	8.1
	2	Punitive	.17	12.9	2	ACOR	-.25	12.9
OrgCom	1	ACOR	.64	40.3	1	Rehab	.06	13.1
					2	HS	.02	15.6
					3	ACOR	.60	40.7
JobPerf	1	ACOR	.20	4.1	1	Punitive	-.20	4.0
Citizenship	1	Rehab	.26	6.8	1	Rehab	.26	6.8
ITurnover	1	ACOR	-.16	2.5	1	ACOR	-.16	2.5

Note:

p < .007 as corrected for family-wise error rate.

B's (Beta coefficients) reported are those attained in the last step.

Cum.R² is the cumulative proportion of variance (%).

IMAGE EVALUATION TEST TARGET (QA-3)

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