

The Correspondence of Objective and Subjective Measures of Prison Climates - A "Casual" Analysis

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Introduction

A prison's organizational environment can be described by measures of the objective (directly observable) and subjective (latent or indirectly observable) phenomena that define its climates. Each environment is composed of as many climates as there are meaningful interactions between people and things in that environment (Schneider, 1983; Saylor, 1983). Monitoring these climate measures for uniformity or change across prison facilities or across time can enhance prison management effectiveness by providing indicators of process performance. The Key Indicators/strategic Support System (KI/SSS), a PC-based menu-driven system designed and developed by the Federal Bureau of Prisons (Saylor, 1983, 1987, 1988, 1989), provides management with on-demand access to such a data conduit (a continuous flow of data) for use in support of decision-making, policy impact assessment, quality control assurance, and strategic planning. Furthermore, the system is designed to support statistical analysis in pursuit of basic and evaluative research.

This paper provides a brief description of the demands that influenced the development of the KI/SSS, the applications it was designed to provide, and some of the measures contained in the system. The discussion is intended to convey an understanding of the information system that generated the data used in the subsequent analysis of prison staff perceptions of their institutional climates. The discussion also argues that an analysis of the correspondence of objective and subjective measures will benefit the Bureau's management and the field of corrections.

Contemporary Correctional Management and the Demand for Information

The population explosion in prisons over the last decade has brought new demands for correctional managers. These demands are further amplified by the volatility of the many social and technological changes in contemporary society. Indeed, prisons are a microcosm of society, and confined populations generally require many of the same services and amenities that social and technological changes have made available to the entire society. Consequently, the traditional methods and tools of correctional management are no longer adequate. Contemporary demands require managers to augment their personal observations and experiences with other sources of information in order to best deal with the new complexity of decision-making. Although demands for information frequently come from within an agency (e.g., for decision support purposes), requests from external sources (e.g., the public, the mass media, legislative bodies) are becoming equally as common. The ability to quickly and efficiently generate and analyze large quantities of valid and reliable information related to the full range of issues required to manage these microsocieties has become critical.

Many other contemporary social organizations are similarly faced with greater complexity in decision-making due to these same social and technological changes. This has resulted in many innovations in the management methods utilized by these organizations. One of these innovations, total quality management (TQM) (also referred to as either continuous process control (CPC) or benchmarking), has been advocated by W. Edwards Deming (1986), considered by many to be the "father" of contemporary quality control methods. Adherence to this method requires a continuous monitoring of the production process, which allows management to observe unwanted variance in the quality of the

"product" throughout production. This differs from other quality control philosophies that rely on only one quality control check of the finished product. The principle premise of TQM is that quality assurance of a product or phenomenon requires a vehicle to continuously monitor the process which produces that product or phenomenon. It seems that most efforts to assess effectiveness in the field of corrections have invoked a quality control check on the final product only (e.g., did the former inmate continue to violate the rules of society once released from incarceration?). Too little attention has been given to monitoring the process. Growth in the confined population and the absolute and relative reductions in funding levels have increased the need for information infrastructures needed to engage in continuous process control. In other words, the reduced per capita funding levels have created a need for more cost effective operations and better public accountability. The KI/SSS accommodates these demands by providing an integration of the continuous process control philosophy with the concept of strategic planning (Saylor, 1990).

The use of KI/SSS in a TQM or benchmarking application provides comparisons of or associations among indicators for the same or different institutions over time. A univariate application might involve a comparison between an institution's climate measure and some established standard to determine whether it falls within acceptable limits. A multivariate application might involve a statistical analysis designed to confirm or disconfirm some associations between climate measures. In either case, effective use of the system requires an understanding of Bureau of Prisons policies and operations. A univariate TQM application, via KI/SSS, is immediately accessible and useful to BOP managers in pursuit of decision support, continuous process control, or strategic planning. The same KI/SSS databases also allow for multivariate applications such as descriptive summarization and hypothesis testing, which enhance the univariate applications by explaining how the various climate measures relate and what these relationships imply for management's use of these data.

Measuring Institutional Climates

Objective measures are directly observable phenomena, such as how a finite population is segmented with respect to some characteristic, or the frequency with which some event has occurred. In some instances, it may be reasonable to assume there is negligible measurement error, as in the case of some well defined population characteristic such as race or gender. In other instances, this assumption would be unrealistic, for example, when measuring the frequency of prison misconduct.

Subjective measures are latent or indirectly observed phenomena, such as opinions or beliefs based on perceptions of characteristics or events related to the organization, for example, the level of job satisfaction, job-related stress, or concern for safety. These are certainly observed with some degree of measurement error.

Furthermore, there are two sources to the variance in these types of measures. The first relates to the events an individual observes, or is privy to, within some organizational context. The second relates to an individual's biases, that is, the set of experiences and values one invokes to filter and interpret some events.

If it were possible to measure both objective and subjective phenomena directly, without any error in observation, one might expect to find a correspondence in objective and subjective measures of the same or related climates. For example, one might expect to find similarity or consistency between the number of recorded assaults and perceptions of danger. However, since some objective and virtually all subjective phenomena are observed with error, one cannot realistically expect to observe a perfect correspondence between conceptually related objective and subjective measures. Yet, an assessment of the level

of conformity between objective and subjective measures does yield some benefits. For one thing, managers are likely to feel more confident in a set of measures that were consistent in magnitude and direction, relative to a set of measures which were more discrepant. The extent that the measures corroborate one another (say within some acceptable margin) might lend some confidence to an assertion that these are reasonable estimates of the state of nature. Alternatively, a lack of conformity (or a magnitude of discrepancy outside a range that would be considered acceptable) might suggest that (at least from a prudent management standpoint) one should more closely scrutinize the process which generated the measures to ascertain the cause of the discrepancy. While there may be an interest in making this sort of comparative analysis of virtually any organizational climate, one would expect managers to express greater interest in those phenomena which can be manipulated, altered, or at least influenced by management decisions.

The Data

The KI/SSS contains objective measures of an institution by a monthly unit of measure. The objective measures are a by-product of the organization's operational data needs. The data are obtained by extracting cross-sections of the Bureau's mainframe management information systems (MIS) with a monthly periodicity. The objective measures are either global (existing at the institutional level, for example, an institution's security level) or aggregate (institution summaries created by aggregating characteristics of individuals who work at, or are confined in, each facility). The inmate population is segmented by a wide array of sociodemographic and criminal history characteristics. Similarly the staff population is segmented by a broad array of sociodemographic and work history characteristics. The objective measures used in the present analysis are limited to global measures of institutions and aggregate measures of the inmate population.

The subjective measures in KI/SSS exist at two levels, one based on the sociodemographic characteristics of individuals and the other on the institutions where these individuals are located. Both units of measure are derived from individual responses to the BOP'S Prison Social Climate Survey (PSCS). The PSCS is a comprehensive set of questionnaires developed for administration to staff and inmates (Saylor, 1983). The present analysis is limited to data generated by the staff version of the questionnaire, but incorporates both aggregate level measures and the individual level responses used to create the aggregate measures. The staff questionnaire is composed of five sections: sociodemographic, personal safety and security, quality of life, the work environment, and personal well-being. The present analysis does not make use of objective staff measures which exist in the staff mainframe MIS. However, responses to questions about the stratification characteristics, which are contained in the sociodemographic section of the questionnaire, allow for an exact match (in most instances) or a statistical match with records contained in the staff MIS. This provides access to a wealth of additional data that are not solicited on the questionnaire.

Methods

As the title of this report implies, this analysis of correspondence in objective and subjective measures is an exploratory perspective. We are not testing any specific hypotheses about relationships among the objective and subjective measures. We use the general linear model to assess the relative strength and direction of association between a respondent's perceptions of some climate and a set of objective and subjective measures of related phenomena.

The staff version of the PSCS has been administered annually for the past 5 years. This analysis is conducted on respondents to the PSCS questionnaire administered in 1989, 1990, and 1991. Respondents were selected via a 50-percent random stratified propor-

tional probability sample. The sample is drawn from the Bureau's staff MIS based on the set of stratifying characteristics. The stratifying characteristics are job specialty, supervisory status, race, ethnicity, and gender. The response rate for each administration was 72 percent, 83 percent, and 83 percent for the three administrations respectively.

The analysis is at the individual respondent level but includes global and contextual level measures at the survey sample design unit of measure. Table 1 displays the simple statistics for all the measures analyzed. The dependent measures in each of the models presented were taken from the personal safety and security and work environment sections of the PSCS. The respondent level independent measures were drawn from the sociodemographic, work environment, and personal safety and security sections of the PSCS, and the global and contextual institution summaries are drawn from the PSCS and MIS operations data contained in the KI/SSS databases. All but one of the dependent measures are summative scales produced by averaging the responses to the (3 to 10) questionnaire items that compose each scale. The exception is a measure in a percentage scale.

The measures in table 1 are grouped into six types: survey design measures that adjust for the differences in annual administration methods and in the nonresponse generating process (the nonresponse bias appears to be relatively small, but is nevertheless controlled for by the inclusion of the covariates that provide the test of their significance); structural measures - that adjust for known differences in the facilities such as the security level and the rated population capacity; objective contextual measures - characteristics of the inmate population, such as the segmentation of the population with respect to race and criminal history; subjective contextual measures - aggregations of individual responses to the PSCS estimated as the mean response within cells of the stratified sample design; respondent sociodemographic and work history characteristics - measures that compose the population stratification for the proportional probability survey sample design); and perceptual measures of institutional climates - Likert scale and summative Likert scales from the PSCS questionnaire.

Table 2 displays three models of the safety climate. The dependent measures, ASLT-STAF and ASLTINMA, are four-point Likert scales which ask staff how likely it is that an inmate would assault a staff member or an inmate, respectively. The scale ranges from not at all likely, with a value of zero, to very likely, with a value of three. The dependent measure in the third model asks staff to estimate the percentage of inmates in population who are extremely dangerous. This scale ranges in value from 0 to 100. The square root of this measure is analyzed. Several of the design variables are different from zero, indicating that there is evidence of some systematic variation between facility response rates and the level of response on the dependent measures. The inclusion of these design variables has adjusted the other coefficients to remove this bias. As one would expect, staff at the lower security level facilities perceive a lower likelihood of assault and a smaller percentage of extremely dangerous inmates. In the two likelihood-of-assault models, the log of the ratio of the number of inmates confined to the facility's rated capacity is different from zero, although the association is relatively small. The negative association is most likely due to the a greater level of crowding in lower security facilities. Staff at facilities with larger segments of inmates between age 18 and 25 express a greater likelihood of staff assault, although this association is also rather small. There is some nonlinearity to the relationship between the ratio of minority staff to minority inmates. The large negative linear association suggests that staff perceive a safer climate when the minority staff to minority inmate ratio is large, that is, a large number of minority staff relative to the number of minority inmates.

The final block of objective measures estimate the association between the safety climate and the contextual effects due to characteristics of the inmate population. It is interesting to note the association of the CCCA variable, the proportion of inmates who were sen-

tenced under the 1984 Comprehensive Crime Control Act (CCCA) (these inmates are sentenced to flat time, with no parole and annually vested good time), because it indicates that staff do not perceive a greater likelihood of danger with increasing numbers of inmates with these sentences. This was a major concern expressed by all levels of management when this act first became law. In general, the objective contextual measures appear to have a large association with staff perceptions of the safety climate, and the direction of the relationships is consistent with what one might expect. One final observation on this group of measures: the segment of the population with a life sentence is negatively associated with the staff assault scale, not associated with the inmate assault scale, and positively associated with the estimation of extremely dangerous inmates in population. It would seem that if an increase or decrease in the segment of the population with a life sentence is positively associated with perceptions of how dangerous the inmate population is then perceptions of the likelihood of either a staff or an inmate assault should also vary with the proportion of inmates with life sentences.

The block of subjective contextual measures has little association with the safety climate. The sociodemographic and work history items have a uniformly moderate level of association with orientations that are predictable. One of the largest associations with the likelihood of assault measures is the percentage of the population presumed to be dangerous.

Table 3 displays three models of the correspondence of staff perceptions of the work environment and the same sets of objective and subjective climate measures analyzed in table 2. The dependent measures are INSTCOMM - institution satisfaction and commitment, INSTOP - an evaluation of the institution's operational performance, and SUPERVIS - an evaluation of the quality of supervision at the institution. All three measures are 7 point summative Likert scales. The scales range from *I strongly disagree* with a value of zero to *I strongly agree* with a value of 6. The *I strongly agree* side of the scale corresponds to a positive evaluation. As was the case with the models in tables 1, there are some statistically significant but small effects due to the survey nonresponse. The security level of the facility also has only a small influence. One's institutional commitment and evaluation of both institutional operations and the quality of supervision are not influenced by the age of the inmate population, although there are some rather large effects due to the racial makeup of the inmate population. Contrary to the models in table 1, the other objective contextual measures that relate to the type of sentence (CCCAMN, SNTGT5YR, and LIFESNMN) and the history of violence among inmates in the population (NOVIOL, VIOLLT5Y, and SERVIOL) have only small to modest effects. As with the models in table 1 the subjective contextual measures have virtually no influence. The association of the respondent's age notwithstanding, the socio-demographic characteristics of the respondents appear to have little correspondence with any of the perceptions of the work environment. The largest associations with the work environment measures are due to the respondent's perceptions of other organizational climate measures. Although the effects are not uniformly large, each model contains at least one or two rather large associations between the respondent's perceptions of other facets of the institution's climates and their perceptions of the work environment.

Table 4 contains three additional models that relate to perceptions of the job, EFFICACY - the respondent's evaluation of how effective they feel they are in dealing with inmates, JOBSTRES the amount of job stress the respondent feels while on the job, and JOBSAT - the amount of job satisfaction expressed by the respondent. The nature of the scales are the same as in table 3, that is, 7 point summative Likert scales with zero corresponding to a low (or negative) evaluation and 6 a high (or positive) evaluation. We have not provided any interpretation of the models contained in table 4. Although we thought the models might nevertheless be of interest to the reader.

In summary, we have observed that the objective contextual measures have the largest association with a respondent's perceptions of an institution's level of safety. Conversely, the respondent's perceptions of the work environment appear to be most highly associated with the respondent's perceptions of other facets of the institution's climates. The analysis presented is a preliminary look at some of the associations between various institutional climate measures. The findings presented here will be used in conjunction with further refinements to the KI/SSS data vehicle and provide a foundation for the specification of more precise causal models of climate phenomena.

TABLE 1

Variable	Label	N	Mean	Minimum	Maximum
SURVEY DESIGN MEASURES					
RESPNSRT	RESPONSE RATE WITHIN SAMPLE CELL	18124	0.888	0	4.000
INSTRSPN	INSTITUTION RESPONSE RATE	18273	0.792	0.246	1.142
REGNRSPPN	REGION RESPONSE RATE	18273	0.769	0.586	0.869
SECLRSPN	SECURITY LEVEL RESPONSE RATE	18273	0.771	0.534	0.892
YR90	EFFECTS VECTOR FOR 1990 ADMINISTRATION	19121	0.065	-1.000	1.000
YR91	EFFECTS VECTOR FOR 1991 ADMINISTRATION	19121	0.141	-1.000	1.000
STRUCTURAL (GLOBAL) MEASURES					
SECLV_1	MINIMUM INST. SEC. LEVEL EFFECTS VECTOR	19121	-0.057	-1.000	1.000
SECLV_2	LOW INST. SEC. LEVEL EFFECTS VECTOR	19121	-0.088	-1.000	1.000
SECLV_3	MEDIUM INST. SEC. LEVEL EFFECTS VECTOR	19121	0.147	-1.000	1.000
SECLV_4	HIGH INST. SEC LEVEL EFFECTS VECTOR	19121	-0.060	-1.000	1.000
PROPRATC	POPULATION LEVEL — PROPORTION RATED CAP.	17852	1.563	0.699	4.350
LNPROPRC	POP. LEVEL — LOG OF PROP. RATED CAP.	17852	0.411	-0.357	1.470
OBJECTIVE CONTEXTUAL MEASURES					
AGE18_25	PROPORTION OF POP. BETWEEN 18 - 25	17852	0.121	0.021	0.323
AGE26_30	PROPORTION OF POP BETWEEN 26 - 30	17852	0.177	0.067	0.375
BLACKMN	PROPORTION OF POP. — BLACK INMATES	17852	0.334	0.022	0.618
WHITEMN	PROPORTION OF POP. — WHITE INMATES	17852	0.639	0.378	0.977
HISPMN	PROPORTION OF POP. — HISPANIC INMATES	17852	0.256	0.007	0.688
BLK_WHT	RATIO OF FREQ. BLACK/WHITE INMATES	17852	0.577	0.023	1.633
BLK_WHT2	SQUARE OF FREQ. BLACK/WHITE INMATES	17852	0.422	0.000	2.669

TABLE 1 (continued)

Variable	Label	N	Mean	Minimum	Maximum
OBJECTIVE CONTEXTUAL MEASURES					
BLK_WHTI	INVERSE OF FREQ. BLACK/WHITE INMATES	17852	2.672	0.612	42.500
MSTFINM	RATIO OF MINORITY STAFF/MINORITY INMATES	16792	0.437	0	1.381
MSTFINM2	SQUARE OF RATIO — MIN. STAFF/MIN. INMATES	16792	0.290	0	1.908
MSTFINMR	SQUARE ROOT OF RATIO-MIN. STAFF/MIN. INMT.	16792	0.613	0	1.175
CCCAMN	PROP. OF 1984 CCCA INMATES (IMPL. 11/87)	17852	0.396	0.004	0.917
SNTGT5YR	PROP. OF POP WITH SENTENCE LENGTH > 5 YRS	17852	0.592	0.009	0.985
LIFESNMN	PROPORTION OF INMATES WITH LIFE SENTENCE	17852	0.028	0	0.320
NOVIOL	PROP. OF INMATES WITH NO VIOLENT HISTORY	17852	0.588	0.047	0.982
VIOLLT5Y	PROP. OF INMATES WITH RECENT HISTORY VIOL	17852	0.107	0	0.579
SERVIOI	PROP. INMATES W/HISTORY OF SERIOUS VIOL	17852	0.244	0	0.924
SUBJECTIVE (PSCS) CONTEXTUAL MEASURES BASED ON STRATIFIED SAMPLE CELL**					
ASLTSTFM	MEAN ESTIMATED ASSAULT RATE ON STAFF	17298	1.149	0	3.000
ASLTINMM	MEAN EST. INMATE-ON-INMATE ASSAULT RATE	17269	1.483	0	3.000
WEAPONSM	MEAN EST. INMATE POSSESSION OF WEAPONS	16040	2.836	0	6.000
INMFORCM	MEAN EST. INMATE USE OF FORCE ON STAFF	15691	1.452	0	6.000
SAFSTFFM	MEAN EST. FEMALE STAFF SAFE	17222	1.993	0	5.000
SAFSTFFM	MEAN EST. MALE STAFF SAFE	17277	1.781	0	5.000
SREXTDNM	MEAN EST. % INMATES VERY DANGEROUS	16972	3.448	0	10.000
CROWDM	MEAN EST. INMATE CONDITIONS CROWDED	18431	1.969	0	4.000
(SCALE)					
STAFCOMN	MEAN EST. INST. DESIGN AFFECT COMMUNICATN	18331	2.008	0	4.000
SDPRCOMN	MEAN EST. MAKE SUGGESTION TO SUPERVISOR	18316	2.080	0	4.000
STAFLOKM	MEAN EST. INST. DESIGN AFFECT INMT. SURVEIL	18320	1.921	0	4.000
STAFSAFM	MEAN EST. INST DESIGN AFFECT STAFF SAFETY	18316	1.996	0	4.000

TABLE 1 (continued)

Variable	Label	N	Mean	Minimum	Maximum
SUBJECTIVE (PSCS) CONTEXTUAL MEASURES BASED ON STRATIFIED SAMPLE CELL**					
EFFICYM	MEAN EST. EFFICACY IN DEALING W/INMATES (SCALE)	18619	3.644	0	6.000
JOBSTRSM	MEAN EST. JOB STRESS (SCALE)	18618	2.280	0	6.000
TRAINM	MEAN EST. TRAINING IS EFFECTIVE (SCALE)	18617	3.841	0	6.000
TRNSUPM	MEAN EST. TRNG. SUPPORTED BY MGMT (SCALE)	18603	3.959	0	6.000
SUPERVSM	MEAN EST. QUALITY OF SUPERVISION (SCALE)	18621	3.627	0	6.000
INSTOPM	MEAN EST. INST/ORG OPERATIONS (SCALE)	18629	3.434	0	6.000
JOBSATM	MEAN EST. JOB SATISFACTION (SCALE)	18622	4.006	0	6.000
INSTCOMN	MEAN EST. INSTITUTION SATISFACTION AND COMMITMENT (SCALE)	18614	3.585	0	6.000
BOPCOMN	MEAN EST. BOP SATISFACTION AND COMMITMENT (SCALE)	18614	4.154	0	6.000

INDIVIDUAL LEVEL RESPONSES TO PSCS* RESPONDENT SOCIO-DEMOGRAPHICS

BLKSTAFF	EFFECTS VECTOR — BLACK STAFF	19121	-0.713	-1.000	1.000
WHITSTAFF	EFFECTS VECTOR — WHITE STAFF	19121	0.549	-1.000	1.000
HISPANIC	EFFECTS VECTOR — HISPANIC STAFF	18826	-0.829	-1.000	1.000
FEMALE	MALE = 1 FEMALE = 1	18859	-0.514	-1.000	1.000
AGE	REPORTED AGE OF RESPONDENT IN YEARS	18891	34.881	18.000	71.000
SUPERVIZ	NONSUPERVISOR=1 SUPERVISOR=1	18622	-0.594	-1.000	1.000
CUSTODY	CORRECTIONS = 1 NONCORRECTION = 0	18698	-0.311	-1.000	1.000
INMACONT	HOW OFTEN DO YOU HAVE CONTACT W/INMATE?	19002	5.779	0	6.000

TABLE 1 (continued)

Variable	Label	N	Mean	Minimum	Maximum
INDIVIDUAL LEVEL RESPONSES TO PSCS* RESPONDENT SOCIO-DEMOGRAPHICS					
MOSBOP	MONTHS WITH THE BUREAU	18822	72.436	1.000	479.000
LNMOSBOP	LOG OF MONTHS WITH THE BUREAU	18822	3.702	0	6.171
MAINFACL	WORK AT MAIN FACILITY VS. SAT. CAMP	19121	-0.201	-1.000	1.000
DAYSHIFT	WORK DAY SHIFT	19121	0.310	-1.000	1.000
PERCEPTIONS OF INSTITUTIONAL CLIMATES					
ASLTSTAF	LIKELIHOOD OF STAFF ASSAULT ON GROUNDS	8424	1.165	0	3.000
ASLTINMA	LIKELIHOOD OF INMATE ASSAULT IN H/UNIT	8317	1.434	0	3.000
WEAPONS	HOW OFTEN DO INMATES POSSESS WEAPONS	6400	2.885	0	6.000
INMFORCE	HOW OFTEN INMATE USE FORCE ON STAFF	5523	1.499	0	6.000
SAFSTFEE	HOW SAFE ARE FEMALE STAFF MEMBERS	7890	1.954	0	5.000
SAFSTFMA	HOW SAFE ARE MALE STAFF MEMBERS	8272	1.790	0	5.000
EXTDANG	WHAT % OF INMATES ARE VERY DANGEROUS	7971	17.944	0	100.000
SREXTDNG	SQUARE FOOT % INMTS VERY DANGEROUS	7971	3.409	0	10.000
CROWD	INMATE CONDITIONS CROWDED	11998	2.000	0	4.000
STAFCOMM	COMMUNICATION AMONG LINE STAFF	11774	1.981	0	4.000
SUPRCOMM	COMM. BETWEEN LINESTAFF & SUPERVISOR	11711	2.059	0	4.000
STAFLOOK	STAFF SURVEILLANCE OF INMATES	11717	1.887	0	4.000
STAFSAFE	STAFF SAFETY	11709	1.961	0	4.000
EFFICACY	EFFICACY IN DEALING WITH INMATES (SCALE)	13960	3.639	0	6.000
JOBSTRES	JOB STRESS (SCALE)	13961	2.287	0	6.000
TRAINING	TRAINING HELPS IN MY JOB (SCALE)	1395	3.833	0	6.000
TRAINSUP	TRAINING NEEDS ARE SUPPORTED (SCALE)	13839	3.951	0	6.000

TABLE 1 (continued)

Variable	Label	N	Mean	Minimum	Maximum
PERCEPTIONS OF INSTITUTIONAL CLIMATES					
TWNBUCKS	COST OF LIVING COMPARED TO SALARY	11940	2.349	0	4.000
NUPBUCKS	EARN ENOUGH MONEY TO LIVE COMFY	11928	0.327	0	1.000
SUPERVIS	QUALITY OF SUPERVISION (SCALE)	13985	3.617	0	6.000
INSTOP	INSTITUTION OPERATIONS (SCALE)	14014	3.418	0	6.000
JOBSAT	JOB SATISFACTION (SCALE)	13996	4.011	0	6.000
INSTCOMM	COMMITMENT TO THE INSTITUTION (SCALE)	13978	3.577	0	6.000
BOPCOMM	COMMITMENT TO THE BUREAU (SCALE)	13987	4.157	0	6.000

*EXCEPT WHEN NOTED AS "(SCALE)" ALL MEASURES ARE BASED ON INDIVIDUAL ITEMS. THE MEASURES THAT ARE NOTED AS "(SCALE)" ARE SUMMATIVE SCALES COMPOSED OF ANYWHERE FROM TWO TO TEN INDIVIDUAL LIKERT SCALED ITEMS.

Table 2

Standardized Estimates of the Correspondence of Objective and Subjective Climate Measures and Perceptions of Safety

INDEPENDENT VARIABLES	Dependent Variables		
	ASLTSTAF n=6333 R-square=0.2892	ASLTINMA n=6282 R-square=0.2419	SREXTDNG n=6373 R-square=0.4526
INTERCEP	0.0000	0.0000	0.0000
RESPNSRT	0.0084	0.0127	0.0178
INSTRSPN	0.0162	-0.0433*	-0.0033
REGNRSPN	-0.0343	0.0443	-0.0447*
SECLRSPN	-0.0747*	0.0434	-0.1652*
YR90	0.0692*	0.0568*	0.0699*
YR91	0.0492	-0.0116	0.1248*
SECLV-L	-0.0569*	-0.0838*	-0.1604*
SECLV-2	0.0168	0.0274	-0.1474*
SECLV-3	0.0334	0.0321	0.0967*
SECLV-4	-0.0016	0.0771*	0.1282*
LNPROPRC	-0.0656*	-0.0373*	-0.0116
AGE18-25	0.0748*	0.0222	-0.0125
AGE26-30	-0.0506*	0.0395	-0.0282
BLK WHT	0.1456	0.0082	0.3918*
BLK WHT2	-0.0919	0.0205	-0.2107*
BLK WHTI	-0.0378	-0.0305	-0.0450*
WHITEMN	0.0759	0.0833	0.1604
HISPMN	0.0529*	-0.0050	0.0663*
MSTFINM	-0.5306*	-0.7480*	-0.309

* = p < .05

Table 2 (continued)

Standardized Estimates of the Correspondence of Objective and Subjective Climate Measures and Perceptions of Safety

INDEPENDENT VARIABLES	Dependent Variables		
	ASLTSTAF n=6333 R-square=0.2892	ASLTINMA n=6282 R-square=0.2419	SREXTDNG n=6373 R-square=0.4526
MSTFINM2	0.2575*	0.3170*	0.1150
MSTFINMR	0.2984*	0.4257*	0.1728
CCCAMN	-0.1010*	0.0068	0.0102
SNTGT5YR	-0.0695*	0.0557	-0.0736*
LIFESNMN	-0.2105*	0.0263	0.3782*
NOVIOL	0.1869*	-0.0277	-0.0786
VIOLLT5Y	0.1450*	-0.1224*	-0.1220*
SERVIOL	0.2605*	0.1405*	0.1354*
SREXTDNM	0.0693*	0.0496*	_____
STAFCOMN	-0.0080	-0.0215	0.0127
SUPRCOMN	-0.0079	0.0019	-0.0136
STAFLOKM	-0.0035	-0.0114	-0.0065
CROWDM	0.0244	0.0513*	0.0808*
TRAINM	-0.0246	-0.0363*	0.0281
TRNSUPM	0.0012	0.0019	-0.0224
INSTOPM	-0.0351	-0.0339	-0.0159
SUPERVSM	0.0248	0.0377*	-0.0197
BLKSTAFF	0.0533*	0.0360*	0.0353*
HISPANIC	0.0283*	0.0103	0.0170

* = p < .05

Table 2 (continued)

Standardized Estimates of the Correspondence of Objective and Subjective Climate Measures and Perceptions of Safety

INDEPENDENT VARIABLES	Dependent Variables		
	ASLTSTAF n=6333 R-square=0.2892	ASLTINMA n=6282 R-square=0.2419	SREXTDNG n=6373 R-square=0.4526
FEMALE	0.0176	0.0310*	0.0516*
AGE	-0.0319*	-0.0776*	-0.0821*
SUPERVIZ	-0.0752*	-0.0472*	-0.0070
CUSTODY	0.1056*	0.1343*	0.0574*
INMACONT	0.0319*	0.0360*	-0.0192*
LNMOBOP	0.1495*	0.1498*	0.0630*
MAINFACL	0.0333*	0.0145	0.0278*
DAYSHIFT	-0.0049	-0.0046	-0.0106
SREXTDNG	0.3448*	0.2723*	————

* = $p < .05$

Table 3 (continued)

Standardized Estimates of the Correspondence of Objective and Subjective Climate Measures and Perceptions of the Work Environment

INDEPENDENT VARIABLES	Dependent Variables		
	INSTCOMM n=5756 R-square=0.3134	INSTOP n=7113 R-square=0.6478	SUPERVIS n=7113 R-square=0.5353
INTERCEP	0.0000	0.0000	0.0000
RESPNSRT	0.0396*	0.0122	-0.0103
INSTRSPN	-0.0077	0.0136	0.0000
REGNRSPN	0.0124	-0.0501*	0.0394*
SECLRSPN	0.0756*	0.0373*	-0.0136
YR90	-0.0500*	_____	_____
YR91	-0.0414	_____	_____
SECLV-L	-0.0251	-0.0131	-0.0005
SECLV-2	-0.0675*	0.0653*	-0.0203
SECLV-3	-0.0751*	0.0288	-0.0193
SECLV-4	0.0303	-0.0707*	0.0212
LNPROPRC	0.0175	0.0402*	0.0122
AGE18-25	-0.0455	0.0004	0.0174
AGE26-30	0.0209	0.0287*	0.0185
BLK WHT	0.1320	0.1913*	-0.2734*
BLK WHT2	-0.0342	-0.0747	0.1354*
BLK WHTI	0.0189	0.0127	-0.0035
WHITEMN	0.1690	0.1379*	-0.1325
HISPMN	-0.0155	-0.0410*	-0.0332

* = p < .05

Table 3 (continued)

Standardized Estimates of the Correspondence of Objective and Subjective Climate Measures and Perceptions of the Work Environment

INDEPENDENT VARIABLES	Dependent Variables		
	INSTCOMM n=5756 R-square=0.3134	INSTOP n=7113 R-square=0.6478	SUPERVIS n=7113 R-square=0.5353
MSTFINM	-0.5813*	0.1965	0.1729
MSTFINM2	0.2811*	-0.0986	-0.0685
MSTFINMR	0.1531	-0.1128	-0.1060
CCCAMN	-0.0023	0.0233	-0.0186
SNTGT5YR	-0.0020	-0.0308	0.0368
LIFESNMN	-0.0205	-0.0306	0.1005*
NOVIOL	0.1231*	-0.0583*	-0.0302
VIOLLT5Y	0.0668	0.0499	-0.1060*
SERVIOL	0.0732	0.0628	-0.0820
ASLTINMM	-0.0109	-0.0022	0.0186
ASLTSTFM	-0.0288	0.0159	-0.0232
WEAPONSM	-0.0214	-0.0035	0.0175
INMFORCM	0.0043	-0.0056	0.0022
SAFSTFFM	-0.0154	-0.0032	0.0070
SAFSTFMM	0.0298	-0.0267	0.0028
SREXTDNM	0.0213	0.0096	-0.0123
CROWDM	-0.0194	0.0328*	-0.0445*
STAFCOMN	0.0459*	_____	_____
SUPRCOMN	-0.0129	_____	_____

* = p < .05

Table 3 (continued)

Standardized Estimates of the Correspondence of Objective and Subjective Climate Measures and Perceptions of the Work Environment

INDEPENDENT VARIABLES	Dependent Variables		
	INSTCOMM n=5756 R-square=0.3134	INSTOP n=7113 R-square=0.6478	SUPERVIS n=7113 R-square=0.5353
STAFLOKM	0.0336*	————	————
INSTOPM	0.0434	————	0.0013
EFFICYM	-0.0387*	0.0031	-0.0059
JOBSTRSM	0.0218	-0.0237*	0.0174
TRAINM	0.0060	0.0170	-0.0049
TRNSUPM	-0.0316	0.0059	0.0084
SUPERVSM	-0.0331	0.0128	————
JOBSATM	-0.0595*	0.0045	0.0172
BOPCOMN	0.0406*	-0.0115	0.0200
INSTCOMN	————	0.0093	-0.0161
BLKSTAFF	-0.0109	0.0272*	-0.0177
HISPANIC	0.0375*	0.0088	-0.0016
FEMALE	-0.0011	-0.0122	-0.0014
AGE	0.1140*	0.0133	-0.0538*
SUPERVIZ	-0.0966*	0.0440*	-0.0144
CUSTODY	-0.0480*	0.0406*	-0.1055*
INMACONT	-0.0054	-0.0078	0.0088
LNMOBOP	-0.0209	-0.0272*	-0.0008

* = p < .05

Table 3 (continued)

Standardized Estimates of the Correspondence of Objective and Subjective Climate Measures and Perceptions of the Work Environment

INDEPENDENT VARIABLES	Dependent Variables		
	INSTCOMM n=5756 R-square=0.3134	INSTOP n=7113 R-square=0.6478	SUPERVIS n=7113 R-square=0.5353
MAINFACL	0.0252	-0.0153	0.0150
DAYSHIFT	0.0273*	0.0072	0.0361*
STAFCOMM	0.0329	_____	_____
SUPRCOMM	0.0089	_____	_____
STAFLOOK	0.0231	_____	_____
CROWD	0.0099	-0.0660*	0.0275*
INSTOP	0.1035*	_____	0.4346*
EFFICACY	0.0292*	0.0173*	0.0193*
JOBSTRES	0.0209	-0.0848*	0.0082
TRAINING	0.0220	0.0915*	0.0276*
TRAINSUP	-0.0006	0.1246*	0.1719*
SUPERVIS	0.0840*	0.3257*	_____
JOBSAT	0.1465*	-0.0206*	0.1586*
INSTCOMM	_____	0.0545*	0.0564*
BOPCOMM	0.2132*	0.3212*	0.0115
TWNBUCKS	-0.0324*	_____	_____
NUFBUCKS	-0.0124	_____	_____

* = $p < .05$

Table 4**Standardized Estimates Of The Correspondence Of Objective And Subjective Climate Measures And Perceptions Of The Job**

INDEPENDENT VARIABLES	Dependent Variables		
	EFFICACY n=5796 R-square=0.2220	JOBSTRES n=5756 R-square=0.3080	JOBSAT n=5756 R-square=0.4824
INTERCEP	0.0000	0.0000	0.0000
RESPNSRT	0.0286*	0.0125	0.0115
INSTRSPN	-0.0298	0.0046	-0.0377*
REGNRSPN	-0.0220	-0.0265	-0.0456*
SECLRSPN	0.0204	-0.0047	0.0122
YR90	0.0017	-0.0033	0.0287
YR91	0.0622	0.0519	0.0382
SECLV-L	0.0141	0.0048	-0.0215
SECLV-2	-0.0203	0.0169	-0.0010
SECLV-3	-0.0006	0.0174	-0.0057
SECLV-4	-0.0846*	-0.0521	0.0351
LNPROPRC	-0.0125	-0.0223	-0.0090
AGE18-25	0.0016	-0.0216	0.0362
AGE26-30	0.0321	0.0100	-0.0279
BLK WHT	0.2853	0.0365	0.2663*
BLK WHT2	-0.1502	-0.0474	-0.1512*
BLK-WHTI	-0.0171	————	0.0133
WHITEMN	0.1811	-0.0671	0.0983
HISPMN	-0.0368	0.0400	0.0082

* = p < .05

Table 4 (continued)

Standardized Estimates Of The Correspondence Of Objective And Subjective Climate Measures And Perceptions Of The Job

INDEPENDENT VARIABLES	Dependent Variables		
	EFFICACY n=5796 R-square=0.2220	JOBSTRES n=5756 R-square=0.3080	JOBSAT n=5756 R-square=0.4824
MSTFINM	0.3230	-0.0119	0.0117
MSTFINM2	-0.1461	0.0160	-0.0003
MSTFINMR	-0.1540	-0.0336	-0.0165
CCCAMN	0.0036	-0.0111	-0.0686*
SNTGT5YR	-0.0093	-0.0977*	0.0174
LIFESNMN	0.0188	-0.1165*	-0.0645
NOVIOL	0.0793	0.0836	0.0445
VIOLLT5Y	-0.0739	0.0986	0.0151
SERVIOL	0.1007	0.0918	0.0299
ASLTINMM	-0.0300	0.0132	-0.0218
ASLTSTFM	0.0316	0.0007	0.0699*
WEAPONSM	-0.0112	-0.0208	0.0244
INMFORCM	-0.0142	-0.0092	0.0072
SAFSTFFM	-0.0230	0.0801*	-0.0068
SAFSTFMM	-0.0219	-0.0050	-0.0466*
SREXTDNM	-0.0175	0.0129	0.0054
STAFCOMN	-0.0027	-0.0223	-0.0237
SUPRCOMN	0.0133	0.0483*	0.0394*
STAFLOKM	-0.0026	-0.0249	-0.0080

* = p < .05

Table 4 (continued)

Standardized Estimates Of The Correspondence Of Objective And Subjective Climate Measures And Perceptions Of The Job

INDEPENDENT VARIABLES	Dependent Variables		
	EFFICACY n=5796 R-square=0.2220	JOBSTRES n=5756 R-square=0.3080	JOBSAT n=5756 R-square=0.4824
STAFSAFM	0.0137	————	————
CROWDM	0.0238	-0.0270	-0.0349*
JOBSTRSM	-0.0187	————	-0.0037
TRAINM	0.0263	-0.0133	-0.0229
EFFICYM	————	-0.0145	0.0016
TRNSUPM	-0.0399	0.0092	0.0283
INSTOPM	-0.0047	-0.0179	-0.0039
SUPERVSM	0.0362	0.0064	0.0281
BOPCOMN	-0.0283	————	-0.0323
JOBSATM	0.0041	0.0373	————
INSTCOMN	-0.0485*	0.0106	-0.0492*
BLKSTAFF	0.0664*	-0.0750*	-0.0683*
HISPANIC	0.0395*	-0.0347*	0.0005
FEMALE	-0.1050*	0.0176	0.0026
AGE	0.0800*	-0.0993*	0.0243
SUPERVIZ	0.0079	0.0410*	0.0533*
CUSTODY	0.0044	-0.0454*	-0.1399*
INMACONT	0.1675*	0.0307*	-0.0270*
LNMOBOP	0.00341	0.2160*	0.0525*
MAINFACL	0.0483*	0.0095	-0.0035

* = p < .05

Table 4 (continued)

Standardized Estimates Of The Correspondence Of Objective And Subjective Climate Measures And Perceptions Of The Job

INDEPENDENT VARIABLES	Dependent Variables		
	EFFICACY n=5796 R-square=0.2220	JOBSTRES n=5756 R-square=0.3080	JOBSAT n=5756 R-square=0.4824
DAYSHIFT	-0.0382*	0.0266*	0.0144
STAFCOMM	0.0415*	-0.0377*	-0.0275
SUPRCOMM	-0.0451*	0.0071	0.0080
STAFLOOK	0.0105	-0.0341*	-0.0246*
STAFSAFE	0.0583*	————	————
JOBSTRES	-0.0860*	————	-0.1707*
CROWD	0.0595*	0.0850*	0.0184
TRAINING	0.0579*	-0.0277	0.0389*
TRAINSUP	0.0140	-0.0086	0.0036
INSTOP	0.0402	-0.2061*	-0.0331
SUPERVIS	0.0266	0.0180	0.1641*
JOBSAT	0.1436*	-0.2672*	————
INSTCOMM	0.0350*	0.0099	0.1159*
BOPCOMM	0.0634*	————	0.3541*
EFFICACY	————	-0.0857*	0.0924*
NUFBUCKS	————	-0.0084	0.0309*
TWNBUCKS	————	0.0026	0.0076

* = p < .05

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