

Transformational Leadership, Occupational Stress, and Personality Traits as Predictors of Organizational Culture among Philippine National Police Personnel: Implications for Educational Administration in Criminal Justice Education

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ABSTRACT

This study investigated organizational culture formation among Philippine National Police (PNP) personnel in Zamboanga City, focusing on the interplay of occupational stress, transformational leadership, and personality traits, and its implications for Educational Administration in Criminal Justice Education. Grounded in McCreary and Thompson's (2006) occupational stress model, Bass and Avolio's (2000) transformational leadership theory, Goldberg's (1993) Big Five personality framework, and Cochran and Bromley's (2003) police culture theory, the research developed a structural model that can inform educational administration practices in criminology programs and police training institutions. Employing a quantitative descriptive-correlational design with Structural Equation Modeling (SEM), 400 PNP personnel were selected through stratified random sampling. Validated instruments were utilized: Police Stress Questionnaire, Multifactor Leadership Questionnaire (MLQ-5X), Big Five Inventory, and Police Occupational Culture Scale. Mean, standard deviation, Pearson correlation, multiple regression, and SEM were employed. Results revealed high levels of occupational stress ($M=3.51$, $SD=0.55$), high transformational leadership ($M=3.93$, $SD=0.53$), moderate personality traits ($M=3.33$, $SD=0.41$), and high organizational culture ($M=3.68$, $SD=0.42$), characterized by strong solidarity and service orientation with moderate cynicism. Significant positive relationships were established: personality traits ($r=.68$, $p<.001$), transformational leadership ($r=.39$, $p<.001$), and occupational stress ($r=.31$, $p<.001$) with organizational culture. Regression analysis confirmed all three as significant predictors, with personality as the strongest ($\beta=.600$, $p<.001$), followed by transformational leadership ($\beta=.386$, $p<.001$) and occupational stress ($\beta=.219$, $p=.001$). Five structural models were tested; Model 5 emerged as the best-fit model with excellent fit indices: $CMIN/DF=1.157$, $p=.199$, $GFI=.976$, $CFI=.995$, $NFI=.968$, $TLI=.994$, $RMSEA=.020$, $P\text{-close}=.998$. In Model 5, transformational leadership directly influenced occupational stress ($\beta=.468$, $p<.001$) and personality ($\beta=.697$, $p<.001$); occupational stress influenced personality ($\beta=.269$, $p<.001$); and personality directly influenced organizational culture ($\beta=.774$, $p<.001$). Occupational stress had no direct effect on culture but an indirect effect through personality. The study concludes that organizational culture in law enforcement is educable and can be intentionally transformed through educational administration via leadership development, stress resilience education, and character formation integrated into the criminal justice education curriculum.

Keywords: educational administration, criminal justice education, organizational culture

formation, occupational stress, transformational leadership, personality traits, structural equation modeling, Philippine National Police

1. INTRODUCTION

Organizational culture in law enforcement is widely recognized as a powerful determinant of officer behavior, public trust, and institutional legitimacy. While police culture fosters solidarity and operational cohesion, its dysfunctional manifestations— isolation, cynicism, traditionalism, and crime-control orientation—pose persistent challenges to democratic and community-oriented policing. In the Philippines, where the Philippine National Police (PNP) retains a paramilitary structure, these cultural patterns remain pronounced and often conflict with human rights-based and service-oriented policing ideals (Dempsey, Forst, & Carter, 2019; Fitch, 2014).

Conventional approaches treat police culture as a disciplinary or administrative problem to be addressed in the precinct. This study offers a paradigmatic shift by treating culture formation as an educational administration concern. Educational Administration in Criminal Justice Education encompasses the systematic planning, organization, supervision, and evaluation of academic programs, faculty development, student services, and field training that collectively shape future law enforcement professionals. From this lens, organizational culture is not merely encountered in the field but is learned, internalized, and can be transformed through intentional educational processes long before officers enter service.

Three constructs are central to this educational administration perspective. First, occupational stress—both operational and organizational—is a potent socializing force that pushes officers toward defensive solidarity. Administering stress resilience education is therefore an educational administration function. Second, transformational leadership—comprising idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 2000)—creates ethical climates that counteract cynicism and traditionalism. Administering leadership formation through role modeling and mentoring is a core responsibility of educational administrators. Third, personality traits—extraversion, agreeableness, conscientiousness, neuroticism, and openness (Goldberg, 1993)—influence how individuals adapt to cultural norms. Administering character and personality development as program outcomes is likewise an educational administration mandate.

Despite extensive literature on police culture, few studies integrate these three antecedents into a single structural model in the Philippine context, and fewer still interpret findings for educational administration in criminal justice education. This study addresses that gap by developing and validating a structural model of organizational culture formation and drawing explicit implications for educational administration.

Statement of the Problem

This study aimed to investigate organizational culture formation in law enforcement and its implications for Educational Administration in Criminal Justice Education. To achieve publication-ready rigor, the original seven problems were streamlined and rephrased into three focused problems encompassing descriptive and inferential inquiry:

Problem 1 [Descriptive]: What is the level of occupational stress, transformational leadership, personality traits, and organizational culture among Philippine National Police personnel in Zamboanga City?

Problem 2 [Inferential - Relational and Influential]: Is there a significant relationship between occupational stress, transformational leadership, personality traits, and organizational culture, and do these variables significantly influence organizational culture?

Problem 3 [Inferential - Model Development]: What structural equation model best fits organizational culture formation in law enforcement that can serve as a framework for Educational Administration in Criminal Justice Education?

Hypotheses

Ho1: There is no significant relationship between occupational stress, transformational leadership, personality traits, and organizational culture.

Ho2: Occupational stress, transformational leadership, and personality traits do not significantly influence organizational culture.

Ho3: No structural model fits the data on organizational culture formation in law enforcement.

2. Literature Review

Occupational Stress and Educational Administration. McCreary and Thompson (2006) distinguished operational stress (danger, trauma, shift work, exposure to human suffering) from organizational stress (excessive paperwork, inadequate resources, unfair promotion, lack of support). Both dimensions generate coping mechanisms such as withdrawal into peer solidarity and cynicism toward civilians (Anshel, 2000; Shane, 2010). Scott (2004) found organizational stress to be more predictive of maladaptive culture than operational stress. From an educational administration perspective, this suggests that stress management must be administered as part of the criminology curriculum through simulation-based learning, critical incident debriefing, and wellness education, rather than leaving officers to learn coping informally in the field.

Lai and Templanza (2025) highlighted the role of educational administrators and instructional supervisors in setting policies, offering resources, improving personnel competencies and ensuring work responsiveness.

Transformational Leadership and Educational Administration. Transformational leadership theory (Bass & Avolio, 2000) posits that leaders who exhibit idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration foster ethical climates, reduce cynicism, and promote receptivity to change (Bass & Bass, 2009; Northouse, 2021). In contrast, laissez-faire and coercive leadership reinforce traditionalism and code of silence. Educational administration literature emphasizes that leadership is best administered through modeling and mentoring. Bates et al. (2010) argued that transformational leadership formation in criminology programs through faculty role modeling, reflective supervision during internship, and leadership laboratories is more effective than theoretical instruction alone. Thus, administering transformational leadership development is central to transforming organizational culture.

Personality Traits and Educational Administration. The Big Five model (Goldberg, 1993)—extraversion, agreeableness, conscientiousness, neuroticism, openness—predicts adaptation to organizational culture. Conscientiousness and openness are linked to service orientation and openness to change; neuroticism is linked to cynicism and isolation; agreeableness supports community partnership (Skolnick, 2008). As Francisco (2020) demonstrated, establishing multi-agency collaborative frameworks is essential for government and private institutions to coordinate efforts, and optimize resource allocation. Educational administration has the mandate to administer holistic student development, integrating personality and character formation as intentional outcomes through counseling, mentoring, peer support, and values formation programs, not merely academic achievement.

Organizational Culture in Law Enforcement and Educational Administration. Cochran and Bromley (2003) and Chen (2016) operationalized police occupational culture into seven dimensions: crime control, service, traditionalism, receptivity to change, cynicism, solidarity, and isolation. Culture is learned through formal training and informal socialization, making it educable. When viewed through educational administration, culture becomes a dependent variable that educational administrators can influence via curriculum alignment, instructional supervision, and the institutional culture of criminology schools. The interplay of stress, leadership, and personality therefore provides an empirically testable framework for educational administration reforms.

3. Method

Research Design

This study employed a quantitative, descriptive-correlational research design with Structural Equation Modeling (SEM). The descriptive component assessed the levels of variables; the correlational component tested relationships, influence, and best-fit model. This design is appropriate for publication-oriented model development studies in educational administration.

Research Locale and Respondents

The study was conducted in Zamboanga City, Region IX, Philippines. Respondents were 400 PNP personnel assigned to city police office, municipal stations, and specialized units, selected through stratified random sampling to ensure representation across units. Inclusion criteria were active duty status and at least one year of service. Sample size exceeded the recommended minimum of 200 for SEM with complex models and satisfied Kline's (2015) 10:1 ratio of respondents to parameters.

Research Instruments

Four validated instruments were used, subjected to expert validation and reliability testing with Cronbach's alpha coefficients ranging from .82 to .91, indicating high reliability:

Police Stress Questionnaire (PSQ) by McCreary and Thompson (2006) – 40 items, two subscales: Operational Stress (20 items) and Organizational Stress (20 items).

Multifactor Leadership Questionnaire (MLQ-5X Short Form) by Bass and Avolio (2000) – 16 items, four subscales: Idealized Influence, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration.

Big Five Inventory by Goldberg (1993) – 50 items, five subscales: Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness.

Police Occupational Culture Scale adapted from Cochran and Bromley (2003) and Chen (2016) – 35 items, seven subscales: Crime Control, Service, Traditionalism, Receptive to Change, Cynicism, Solidarity, Isolation.

All instruments used a 5-point Likert scale from 5 (Strongly Agree/Very High) to 1 (Strongly Disagree/Very Low). Interpretation: 4.20-5.00 Very High, 3.40-4.19 High, 2.60-3.39 Moderate, 1.80-2.59 Low, 1.00-1.79 Very Low.

Data Collection and Ethical Considerations

Ethical clearance was obtained from the University of Mindanao Research Ethics Committee. Administrative permissions were secured from PNP Regional Office IX and Zamboanga City Police Office. Informed consent was obtained, emphasizing voluntary participation, anonymity, and confidentiality in compliance with the Data Privacy Act of 2012. Data were gathered from January to March 2019 through face-to-face administration with assistance from station chiefs. Data were encoded and screened for missing values, outliers (Mahalanobis distance), normality (skewness/kurtosis within ± 2), and multicollinearity (VIF < 5).

Data Analysis

For Problem 1, mean and standard deviation were used. For Problem 2, Pearson product-moment correlation and multiple regression were used. For Problem 3, Structural Equation Modeling using AMOS v.23 was employed. Model fit was evaluated using established educational administration research criteria: Chi-square/Degrees of Freedom (CMIN/DF) < 2.0 , p-value $> .05$ (non-significant), Goodness of Fit Index (GFI) $> .95$, Comparative Fit Index (CFI) $> .95$, Normative Fit Index (NFI) $> .95$, Tucker-Lewis Index (TLI) $> .95$, Root Mean Square Error of Approximation (RMSEA) $< .05$, and P-close $> .05$.

3. Results and Discussion

This section presents results with tables coupled with discussion and explicit implications for Educational Administration in Criminal Justice Education, adhering to IMRD standards for publication.

Problem 1: Level of Occupational Stress, Transformational Leadership, Personality Traits, and Organizational Culture

Construct	Indicator	Mean	SD	Level	Interpretation
Occupational Stress	Operational	3.52	0.65	High	Frequently manifested - danger, trauma, shifts
	Organizational	3.51	0.58	High	Frequently manifested - admin burden, lack of support
	Overall	3.51	0.55	High	High stress environment
Transformational Leadership	Idealized Influence	4.07	0.62	High	Officers view supervisors as role models
	Individualized Consideration	3.99	0.64	High	Supportive mentoring perceived
	Inspirational Motivation	3.91	0.60	High	Motivational communication present
	Intellectual Stimulation	3.76	0.67	High	Least high - need for innovative thinking
	Overall	3.93	0.53	High	Strong transformational leadership climate
Personality Traits	Extraversion	3.59	0.62	High	Sociable and assertive
	Conscientiousness	3.59	0.50	High	Dutiful and disciplined
	Openness	3.38	0.50	High	Open to experience
	Agreeableness	3.19	0.64	Moderate	Moderate concern for others
	Neuroticism	2.90	0.72	Moderate	Moderate emotional instability
	Overall	3.33	0.41	Moderate	Moderate adaptive personality profile

Table 1 reveals high occupational stress, indicating that policing in Zamboanga City is both physically dangerous and organizationally demanding, consistent with McCreary and Thompson (2006) and Shane (2010). The high transformational leadership score is a positive finding, suggesting ongoing reform toward ethical leadership, which educational administration can reinforce. Moderate personality traits indicate officers possess foundational sociability and discipline but require strengthening in agreeableness and

emotional stability. From an educational administration perspective, this pattern underscores the need to administer stress inoculation training, emotional intelligence development, and personality formation within the criminology curriculum before field deployment. Faculty and field training officers must be developed as transformational role models who administer resilience.

Organizational Culture Dimension	Mean	SD	Descriptive Level
Solidarity	4.06	0.63	High
Service	3.86	0.58	High
Traditionalism	3.78	0.55	High
Receptive to Change	3.59	0.52	High
Isolation	3.56	0.61	High
Crime Control	3.55	0.65	High
Cynicism	3.33	0.65	Moderate
Overall Organizational Culture	3.68	0.42	High

Table 2 shows high overall organizational culture with solidarity as the highest dimension, confirming classic police culture thesis that peer cohesion serves as psychological protection (Cochran & Bromley, 2003). Service orientation being second highest is promising for community policing. Moderate cynicism indicates officers are not yet deeply disillusioned, providing a window for educational intervention. The coexistence of high traditionalism and high receptivity to change suggests ambivalence that educational administration can resolve. Educational administration must therefore administer institutional programs that redirect solidarity from exclusive brotherhood to inclusive professional community, and traditionalism from blind obedience to principled discipline, through community immersion, service-learning, and human rights-based instruction administered in criminology programs.

Problem 2: Relationship and Influence among Variables

Path	Pearson r	Standardized Beta (β)	S.E.	C.R.	p-value	Decision on Ho
Transformational Leadership -> Organizational Culture	.39**	.386	.041	6.686	<.001	Reject Ho1, Ho2 - Significant
Personality Traits -> Organizational Culture	.68**	.600	.134	6.570	<.001	Reject Ho1, Ho2 - Strongest predictor
Occupational Stress -> Organizational Culture	.31**	.219	.049	3.246	.001	Reject Ho1, Ho2 - Significant

Table 3 indicates significant positive relationships and influence, thus rejecting Ho1 and Ho2. Personality traits emerged as the strongest predictor of organizational culture ($\beta=.600$, $p<.001$), supporting Goldberg (1993) and Skolnick (2008) that dispositional factors shape cultural internalization. Transformational leadership significantly influences culture ($\beta=.386$, $p<.001$), affirming Bass and Bass (2009) that ethical leadership climate counteracts cynicism and isolation. Occupational stress significantly predicts culture ($\beta=.219$, $p=.001$), consistent with Shane (2010) that unmanaged stress drives defensive cultural postures. For educational administration, these findings establish that organizational culture formation must be administered holistically: (1) administer personality development through counseling, mentoring, and values formation as intentional program outcomes; (2) administer transformational leadership formation through faculty development and leadership laboratories; (3) administer stress resilience education through wellness centers and realistic job previews during OJT. The triad must be integrated into BS Criminology program

outcomes and supervised by deans as instructional leaders in educational administration.

Problem 3: Best-Fit Structural Model for Educational Administration

Fit Index	Criterion for Good Fit	Model 1 (Initial Hypothesized)	Model 5 (Best-Fit)	Remarks
P-value	>0.05	.000	.199	Non-significant chi-square indicates good fit
CMIN/DF	<2.0	5.957	1.157	Excellent
GFI	>0.95	.819	.976	Passed
CFI	>0.95	.780	.995	Passed
NFI	>0.95	.748	.968	Passed
TLI	>0.95	.745	.994	Passed
RMSEA	<0.05	.111	.020	Excellent - low error
P-close	>0.05	.000	.998	Excellent

Table 4 shows that Model 1 (initial hypothesized model where all three exogenous variables directly predict culture) failed to meet fit criteria. After model modification guided by modification indices and theoretical coherence, Model 5 emerged as best-fit with all indices exceeding thresholds, indicating excellent fit to the data.

Causal Path in Best-Fit Model 5	Beta	S.E.	C.R.	p	Educational Administration Implication
Transformational Leadership -> Occupational Stress	.468	.068	6.852	***	When educational administration administers transformational leadership, stress perception is regulated
Transformational Leadership -> Personality Traits	.697	.050	6.669	***	Leadership administered in schools strongly shapes character formation
Occupational Stress -> Personality Traits	.269	.036	3.547	***	Stress, when administered through resilience education, builds adaptive personality
Personality Traits -> Organizational Culture	.774	.212	6.843	***	Personality is proximal determinant - must be administered via holistic student development
Occupational Stress -> Organizational Culture	.093	.065	1.279	.201 ns	No direct effect; effect is mediated by personality - confirms need

					for educational mediation
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Figure 1: Best-Fit Model (Model 5) - Educational Administration Framework

[Transformational Leadership] $\sim .468 \rightarrow$ [Occupational Stress]
 [Transformational Leadership] $\sim .697 \rightarrow$ [Personality Traits] $\leftarrow \sim .269 \sim$ [Occupational Stress]
 [Personality Traits] $\sim .774 \rightarrow$ [Organizational Culture]

Model 5 explains 68% of variance in organizational culture. It provides a clear, empirically validated framework for educational administration: transformational leadership is the distal driver that influences both occupational stress and personality development; personality is the immediate antecedent of organizational culture; occupational stress influences culture indirectly through personality. This model rejects Ho3 and confirms that a valid structural model exists. The implication for educational administration in criminal justice education is profound: culture transformation must begin with leadership. Deans, program chairs, and PNP Training Service directors must first administer transformational leadership development among faculty, field training officers, and supervisors. When leadership is administered effectively, it buffers occupational stress and nurtures adaptive personality traits (conscientiousness, openness, agreeableness, emotional stability), which in turn reshape organizational culture from cynicism and isolation toward service and openness to change. Therefore, police culture should be administered as a curricular and organizational development outcome, not merely as a disciplinary concern.

Conclusion

PNP personnel in Zamboanga City exhibit high occupational stress, high transformational leadership, moderate personality traits, and high organizational culture anchored on solidarity and service with moderate cynicism.

Occupational stress, transformational leadership, and personality traits are significantly related to and significantly influence organizational culture, with personality traits as the strongest predictor.

The best-fit Model 5 illustrates a causal chain: Transformational Leadership $\rightarrow$ (Occupational Stress $\rightarrow$ Personality Traits) $\rightarrow$ Organizational Culture. Transformational leadership is the foundational driver; personality traits are the immediate antecedent; occupational stress operates indirectly via personality.

Organizational culture formation in law enforcement is educable, measurable, and manageable through Educational Administration in Criminal Justice Education. It can be intentionally transformed through strategic administration of leadership formation, stress resilience education, and character development programs embedded in the criminology curriculum and PNP professional development.

Recommendations for Educational Administration

For Educational Administration in Criminal Justice Education - Academic Institutions (Deans, Program Chairs):

Curriculum Administration: Institutionalize three core courses—(a) Police Wellness and Occupational Stress Resilience (3 units), (b) Transformational Leadership and Ethical Governance in Law Enforcement (3 units), (c) Personality Development and Professional Character Formation—aligned with program outcomes and administered across all year levels.

Instructional Administration: Administer comprehensive faculty development programs on transformational leadership, trauma-informed pedagogy, and mentoring. Faculty must model idealized influence and individualized consideration as part of instructional supervision.

Student Services Administration: Administer counseling centers, peer support systems, and values formation

offices specifically for criminology students to strengthen agreeableness and emotional stability before field deployment.

Internship and Field Training Administration: Administer structured OJT supervision where field training officers are carefully selected and trained as transformational mentors; require reflective journals on organizational culture and stress encounters; implement community immersion and service-learning to reduce isolation and enhance service orientation—core functions of educational administration.

For Educational Administration in PNP Training and Doctrine Development:

Leadership Administration: Institutionalize a Transformational Leadership Academy for all supervisory ranks emphasizing intellectual stimulation and individualized consideration to replace coercive supervision—an educational administration reform.

Wellness Administration: Administer organizational wellness centers, mandatory critical incident stress debriefing, and workload rationalization to effectively administer organizational stress, as mandated by educational administration principles of personnel welfare.

Character and Professional Development Administration: Administer personality-based developmental coaching and team complementation programs, using personality assessments for growth and assignment, not punitively—aligned with educational administration's developmental approach.

For Future Research in Educational Administration:

Conduct longitudinal tracer studies following criminology graduates from academic formation to PNP field performance to evaluate long-term impact of educational administration interventions on organizational culture formation; replicate Model 5 in other regions (Luzon, Visayas); incorporate moderating variables such as organizational justice, community engagement, and academic leadership practices to further enrich educational administration theory in criminal justice education.

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