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STATISTICAL EVALUATION OF PERFORMANCE AND TRAINING SATISFACTION AT THE POLICE TRAINING ACADEMY, WUDIL

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ABSTRACT

This survey research examines the determinants affecting academic achievement and training satisfaction among cadets at the Nigeria Police Academy in Wudil, Kano. The investigation evaluated the relationships between study habits and academic performance (quantified by CGPA), the effect of academic challenges on CGPA, the association between training satisfaction and perceived training relevance, the influence of preferred training methodologies, and the determinants affecting overall satisfaction with academic and training experiences. Statistical analysis indicated a strong positive correlation between study hours and CGPA ($r=.311$, $p<.05$) and a considerable negative effect of academic problems on CGPA ($r=-.181$, $p=.028$, $\beta=-.221$, $p=.005$). A significant correlation was identified between perceived training relevance and overall satisfaction ($\chi 2$, $p = .001$). A substantial percentage of cadets (34.2%) choose field training, indicating the need of addressing academic challenges and prioritizing practical, experiential training to enhance cadet performance and enjoyment. Study habits markedly improve academic performance, although academic obstacles provide a substantial obstacle. Cadets prioritize pertinent training, especially practical field activities, which is directly associated with increased overall satisfaction. The robust correlation between perceived training relevance and overall pleasure, together with the preference for field training, indicates potential areas for curricular and pedagogical enhancement.

Keywords: Police Academy, Chi-Square Test, Logistics Regression, Nigeria

INTRODUCTION

The Nigeria Police Academy in Wudil, Kano, plays a crucial role in the training and development of future law enforcement personnel for the country. The efficacy of its teaching and training programs directly influences the Caliber of police personnel in Nigeria. A comprehensive knowledge of the factors affecting the academic performance and training experiences of cadets at this school is essential for evidence-based improvements to its curriculum and instructional methods.

Academic achievement, often assessed by the Cumulative Grade Point Average (CGPA), indicates a cadet's proficiency in theoretical knowledge. It is affected by several aspects, such as personal study habits, the educational environment, and the academic problems faced during their studies (Smith & Jones, 2010). Determining the precise links between these elements and academic achievement within the distinct environment of a police school is essential.

The training satisfaction of cadets is equally significant. Their assessment of the training's relevance and efficacy strongly influences their involvement, motivation, and, ultimately, their readiness for future police responsibilities (Anderson & Brown, 2015). Elements include the perceived significance of training material, the instructional techniques utilized, and the overall training atmosphere can profoundly affect this pleasure.

Prior investigations in higher education have examined the effect of study habits on academic performance (e.g., Credé & Kuncel, 2008) and the impact of academic obstacles on student results (e.g., Tinto, 1993). Likewise, research in vocational and professional training settings has investigated the relationship between training satisfaction and perceived relevance (e.g., Alliger et al., 1997). Nevertheless, there exists a relative scarcity of studies particularly examining the interaction of these characteristics within the distinct context of a Nigerian police academy, where academic rigor is integrated with rigorous physical and tactical training.

Duckworth et al. (2007) present the idea of "grit," characterized as tenacity and enthusiasm for enduring objectives. Their study indicates that tenacity is a crucial predictor of success, frequently surpassing skill in importance. Plant et al. (2005) assert that study duration alone does not consistently forecast GPA, underscoring the significance of the study environment and self-regulatory abilities. They assert that elements including an optimal study environment, efficient time management, goal establishment, and self-regulation are essential for academic achievement. Holton III et al. (2000) introduce the creation of a comprehensive inventory for learning transfer. This framework delineates critical elements within the individual, the training design, and the organizational context that affect the transfer of learning from training to the workplace. Ajayi and Alani (2012) examine the obstacles encountered by undergraduates in Nigerian institutions. These hurdles may encompass insufficient resources, substandard infrastructure, overcrowded classrooms, and socio-economic obstacles. Babalola (2007) analyses the funding of Nigerian institutions. Financial resources and their distribution may profoundly influence educational quality and the overall learning atmosphere. This article emphasizes the necessity of sufficient financial support for schools such as the Nigeria Police Academy to deliver outstanding academic and training programs that enhance cadet performance and happiness. The institution provides extensive training modules designed for both cadets and active officers, in addition to its academic rigor. These programs include a wide range of critical domains, including criminal investigative methodologies, law enforcement methods, weapons expertise, self-defence skills, community policing ideas, and the foundational principles of human rights and ethical standards in policing. The design of these training programs prioritizes the development of

practical skills and professional behavior essential for managing the intricacies of modern policing. A hallmark of the academy's educational methodology is its pronounced focus on practical training, affording cadets and officers essential hands-on experience via realistic and authentic law enforcement situations. The Nigerian Police Academy at Wudil, Kano, significantly influences the future of police in Nigeria via the provision of outstanding education and training.

This study examines the principal determinants affecting cadets' academic performance and training satisfaction at the Nigerian Police Academy in Kano State. The objectives aimed to evaluate the correlation between study habits and academic performance, the influence of academic challenges on CGPA, the relationship between training satisfaction and perceived training relevance, preferences for training methodologies, and determinants of overall satisfaction with academic and training experiences. The research will delineate strengths, possible shortcomings, and chances for enhancement, eventually aiding in the refining of police training methodologies in Nigeria.

MATERIALS AND METHODS

This study utilized a quantitative, cross-sectional research approach, applying statistical analysis to investigate the relationships between different factors and cadet performance and satisfaction. Data were collected from a sample of cadets at the Nigeria Police Academy in Kano using random sample. The given text does not specify the sampling process, sample size, or inclusion/exclusion criteria. It is presumed that they were suitable for the statistical studies conducted.

Descriptive statistics were employed to ascertain the favored training approaches. The investigation utilized Pearson correlation studies to assess the degree and direction of relationships between variables, including study hours and CGPA, as well as academic problems and CGPA. Multiple regression analysis was employed to determine the prediction ability of academic obstacles on CGPA. A chi-square test of independence was utilized to investigate the correlation between perceived training relevance and overall satisfaction. Ultimately, binary logistic regression was employed to model the determinants affecting overall satisfaction with academic and training experiences. The criterion for statistical significance was established at $p<.05$ for all analyses.

RESULTS AND DISCUSSION

The following is the frequency Distribution of the Sociodemographic Characteristics of the Respondents (N = 278)

Table 1: Frequency Distribution

Sociodemographic Characteristics	Frequency	Percent	Valid Percent	Cumulative Percent
Gender of the student				
Female	124	44.6	44.6	44.6
Male	154	55.4	55.4	100.0
Total	278	100.0	100.0	
Dept. of the student				
Accounting	19	6.8	6.8	6.8
Biochemistry	13	4.7	4.7	11.5
Biology	30	10.8	10.8	22.3
Chemistry	15	5.4	5.4	27.7
English	28	10.1	10.1	37.8
History and International Studies	31	11.2	11.2	48.9
Law	11	4.0	4.0	52.9
Management Sciences	29	10.4	10.4	63.3
Mathematics	18	6.5	6.5	69.8
Physics	22	7.9	7.9	77.7
Political Science	31	11.2	11.2	88.8
Sociology	31	11.2	11.2	100.0
Total	278	100.0	100.0	
Age group of students				
21 - 24 years	126	45.3	45.3	45.3
25 - 28 years	152	54.7	54.7	100.0
Total	278	100.0	100.0	

The study sample comprised 278 students, as seen in Table 1, with a predominance of males over girls. Of the respondents, 154 (55.4 percent) were male and 124 (44.6 percent) were female, revealing a little gender disparity favoring male students.

The analysis of respondents' academic departments reveals a very uniform distribution among the twelve programs available at the institution. History and International Studies, Political Science, and Sociology each accounted for the biggest proportions, with 31 students each (11.2 percent each). Biology had 30 students (10.8 percent), while Management Sciences and English had 29 students (10.4 percent) and 28 students (10.1 percent), respectively, both achieving double-digit participation. Physics comprised 22 students (7.9 percent), mathematics included 18 (6.5 percent), and accounting encompassed 19 (6.8 percent). Minor cohorts originated from Chemistry (15 students, 5.4 percent), Biochemistry (13 students, 4.7 percent), and Law (11 students, 4.0 percent). Collectively, these values total 100 percent of respondents, indicating that all submitted questionnaires were legitimate and that each department's proportion may be directly compared without modification.

The age distribution of the responses indicates that slightly more than half (152 students, 54.7 percent) were in the 25–28-year age range, and the remaining 126 students (45.3 percent) were aged 21–24 years. This indicates that most students in the sample were in the advanced stages of their academic studies, maybe reflecting the admission prerequisites or progression framework at the Nigeria Police Academy.

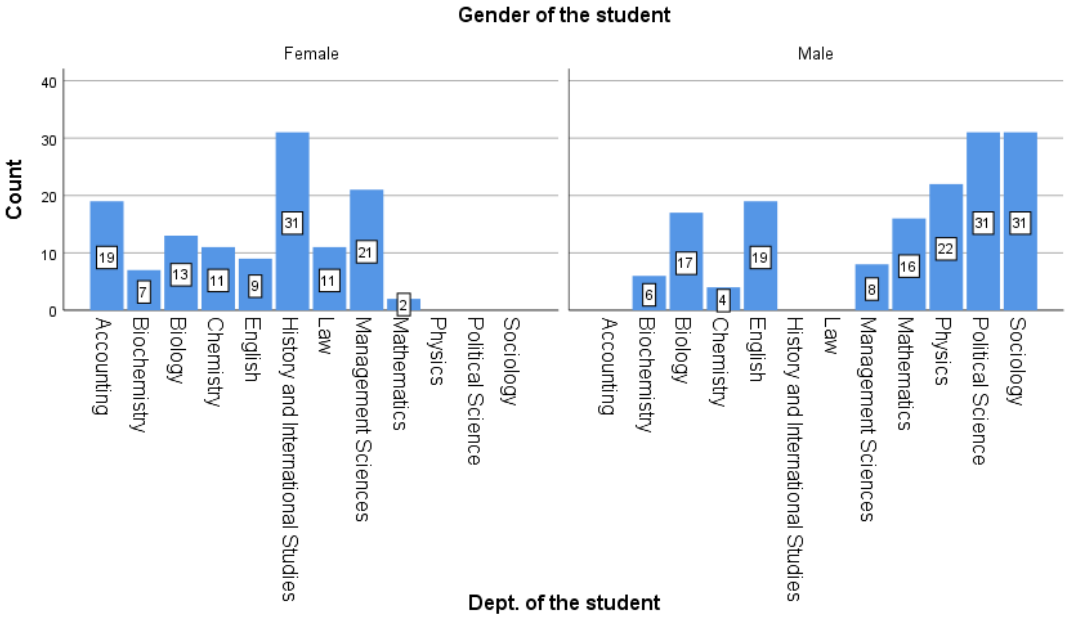

Figure 1: Bar Chart of Number of Students in the various Departments Paneled by their Gender

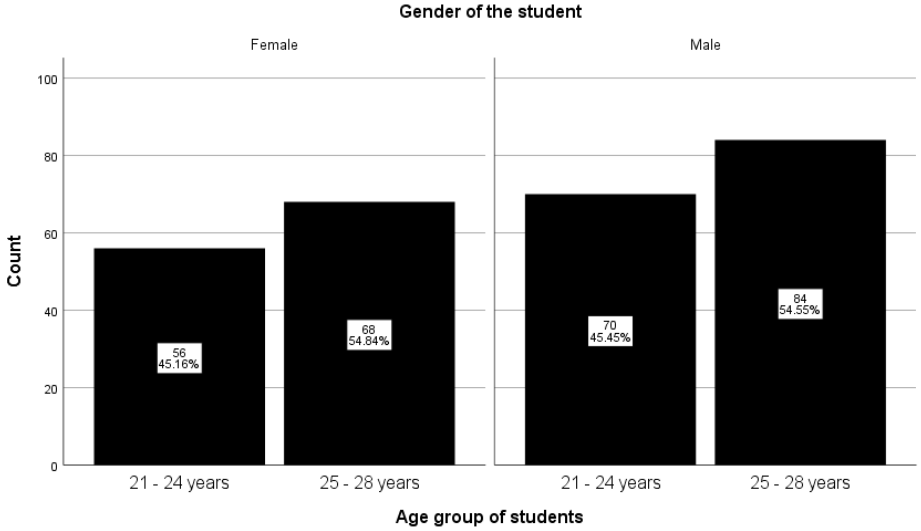

Figure 2: Bar Chart of Age Group of the Students Paneled by their Gender

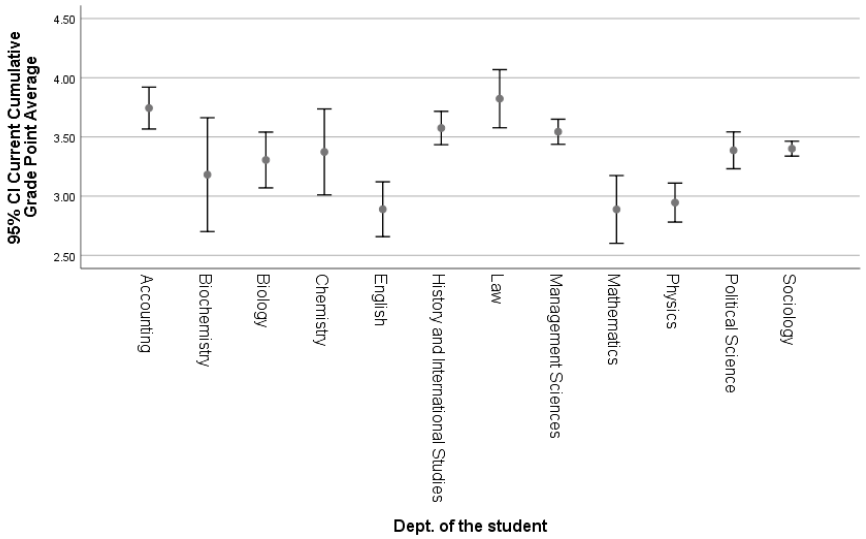

Figure 3: Error Bar Chart of 95% Confidence Interval of the Average CGPA of the various Departments

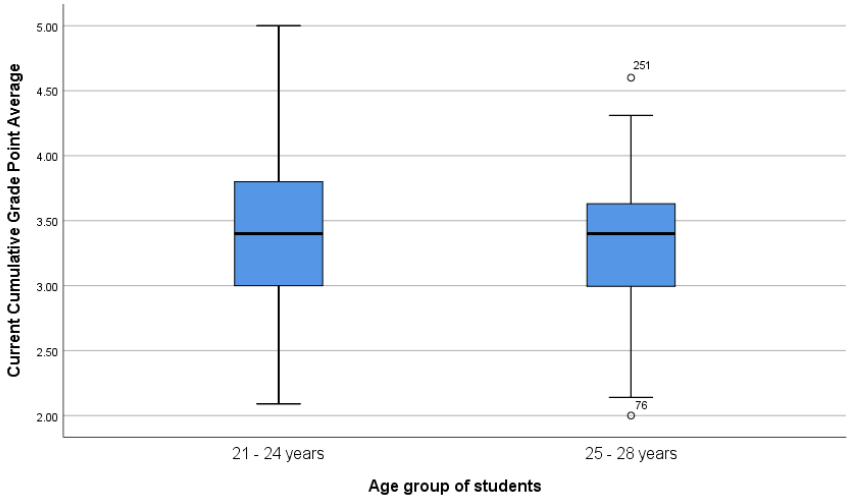

Figure 4: Box and Whisker's Plot of the CGPA of the Students Paneled by their Age Group

Overall, the sociodemographic profile of the respondents shows a slight predominance of male students, a broad representation across academic departments with three disciplines tied as the most represented**,** and a majority of participants in the older age cohort. This diverse yet balanced. distribution provides a solid foundation for examining how academic performance and training outcomes might differ by gender, field of study, and age group within the Academy.

Reliability Analysis of Responses

The following table represent the reliability analysis result of the key responses

Table 2: Reliability Analysis Result of the Key Responses

Cronbach's Alpha	N of Items
0.747	9

Table 2 reports a Cronbach's alpha of .747 for the nine items comprising the key response scale. This coefficient indicates that approximately 74.7 percent of the variance in respondents' total scores reflects consistent, true-score variance rather than random error, meeting the conventional threshold of .70 for acceptable internal consistency in exploratory social-science research.

Given that the scale was newly developed for this study, alpha value of 0.747 in Table 2 suggests the items cohere well enough to justify aggregating them into a single composite score. While higher alphas (e.g., .80 or above) are preferred for high-stakes assessments, the value observed here provides sufficient reliability to proceed with analyses linking these key responses to academic performance and training outcomes within the Nigeria Police Academy sample.

Pearson Correlation Results

Part of the objective was to assess the impact of study habits on academic performance (GPA). In this analysis, the independent variable is the number of study hours per week, categorized as 0–5, 6–10, 11–15, 16–20, and more than 20 hours. The dependent variable is the Cumulative Grade Point Average (GPA), which is a continuous variable. The appropriate statistical method for this analysis is Pearson correlation analysis. This method is chosen because it measures the strength and direction of the linear relationship between the number of study hours and GPA, thereby determining whether increased study time is associated with higher academic performance.

Table 3: Pearson Product Correlation of the Relationship between Students' Study Hours and CGPA

		Number of hours spent studying	Current Cumulative Grade Point Average
Number of hours spent studying	Pearson Correlation	1	.311
	Sig. (2-tailed)		.046
	Sum of Squares and Cross-products	186.043	13.641
	Covariance	.672	.049
	N	278	278
Current Cumulative Grade Point Average	Pearson Correlation	.311	1
	Sig. (2-tailed)	.046	
	Sum of Squares and Cross-products	13.641	81.844
	Covariance	.049	.295
	N	278	278

As shown in Table 3, the Pearson correlation coefficient between the number of hours spent studying and students' current CGPA **is** 0.311, with **a** two-tailed significance value of 0.046**.** This positive coefficient indicates a modest but statistically significant linear relationship: as study hours increase, so does CGPA ($p < .05$). The result means that students that study more are expected to have higher CGPAs at the Nigerian Police Academy, Kano State.

The sum of squares and cross-products, which quantify the total variability for each variable and their joint variability. Specifically, the variability in study hours alone is 186.043, in CGPA alone is 81.844, and their cross-product sum is 13.641. When these are converted into covariances by dividing by $N - 1$ (277), we obtain .672 for study hours, .295 for CGPA, and .049 for their shared covariance, further reflecting the positive association between the two measures (Table 4.3).

With a sample size of 278, the observed correlation ($r = 0.311$) explains roughly 9.7 percent of the variance in CGPA ($r^2 \approx 0.097$), indicating that while study time is a significant predictor of academic performance, the majority of variation in CGPA is attributable to other factors not captured by this single measure of study habits.

Another objective was to evaluate the effect of academic challenges on students' academic performance, measured by CGPA. The independent variables in this analysis are the academic challenges faced by cadets, which were coded as dummy variables representing factors such as inadequate teaching resources, large class sizes, lack of qualified instructors, personal issues, and other specified challenges (number of study hours and nature of study environment). The dependent variable is the Cumulative Grade Point Average (CGPA), a continuous measure of academic performance. The appropriate statistical method for this objective is multiple linear regression. This method is suitable because it allows for the simultaneous assessment of how each academic challenge individually contributes to variations in GPA, thereby identifying the most significant predictors of academic performance.

Table 4: Pearson Product Correlation of the Relationship between Academic/Environmental Challenges and CGPA

		Current Cumulative Grade Point Average	Academic Challenges Faced	Number of hours spent studying	Nature of study environment
Pearson Correlation	Current Cumulative Grade Point Average	1.000	-.181	.311	-.079
	Academic Challenges Faced	-.181	1.000	-.135	.084
	Number of hours spent studying	.311	-.135	1.000	-.060
	Conducive nature of study environment	-.079	.084	-.060	1.000
Sig. (1-tailed)	Current Cumulative Grade Point Average	.	.028	.033	.095
	Academic Challenges Faced	.028	.	.012	.082
	Number of hours spent studying	.033	.012	.	.159
	Nature of study environment	.095	.082	.159	.

Table 4 presents the bivariate Pearson correlations among CGPA and the three predictors. The correlation between academic challenges faced and CGPA is –.181 (one-tailed $p = .028$), indicating a small but statistically significant negative relationship: cadets reporting more challenges tend to have lower GPAs. In contrast, the number of hours spent studying correlates positively with CGPA at .311 (one-tailed $p = .033$), a moderate effect suggesting that increased study time is associated with higher academic performance. The conduciveness of the study environment shows a weak negative correlation with CGPA ($r = –.079$), which does not reach significance (one-tailed $p = .095$), implying no reliable linear association in the bivariate context.

Within the predictor set, intercorrelations are low. Academic challenges and study hours correlate at –.135 (one-tailed $p = .012$), suggesting that cadets facing more obstacles tend to study slightly fewer hours. Academic challenges and study environment correlate at .084 (one-tailed $p = .082$), and study hours and environment at –.060 (one-tailed $p = .159$), neither of which is significant. These low intercorrelations help allay concerns about multicollinearity even before examining formal diagnostics.

Table 5: Model Summary for Regression of CGPA on Academic/Environmental Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.727[a]	.528	.617	.53882	1.980

a. Predictors: (Constant), Conducive nature of study environment, Number of hours spent studying, Academic Challenges Faced, b. Dependent Variable: Current Cumulative Grade Point Average

Table 5 is the model summary reports an R of .727, indicating a strong overall linear relationship between the combined predictors and CGPA. The R Square of .528 suggests that 52.8 percent of the variance in CGPA is explained by academic challenges, study hours, and study environment taken together. The adjusted R Square of .617 (noting that adjusted values normally lie slightly below R Square) purports to account for sample size and predictor count, implying that the model remains robust after penalizing for complexity. The standard error of the estimate (0.53882)

quantifies the average distance that the observed CGPAs fall from the regression line, and the Durbin–Watson statistic of 1.980 indicates no problematic autocorrelation among residuals.

Table 6: ANOVA for Regression of CGPA on Academic/Environmental Factors

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.293	3	.764	8.632	.030[b]
	Residual	79.551	274	.290		
	Total	81.844	277			

a. Dependent Variable: Current Cumulative Grade Point Average

b. Predictors: (Constant), Conducive nature of study environment, Number of hours spent studying, Academic Challenges Faced

The ANOVA in Table 6 confirms the overall model is significant: the regression sum of squares (2.293) over three degrees of freedom yields an F-statistic of 8.632 ($p = .030$), demonstrating that the set of predictors explains a significant portion of CGPA variance beyond what would be expected by chance. The residual sum of squares (79.551) over 274 degrees of freedom captures unexplained variance.

Table 7: Coefficients of the Regression of CGPA on Academic/Environmental Factors

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.177	.110		28.972	.000		
	Academic Challenges Faced	-.221	.012	-.254	1.727	.005	.976	1.024
	Number of hours spent studying	.279	.040	.220	1.990	.048	.979	1.021
	Nature of study environment	-.061	.046	-.080	-1.340	.181	.991	1.010

a. Dependent Variable: Current Cumulative Grade Point Average

The coefficients table in Table 7 unpacks each predictor's unique effect on CGPA when all others are held constant. The constant (intercept) of 3.177 ($t = 28.972$, $p < .001$) represents the expected CGPA when all predictors are at zero. Academic challenges have an unstandardized coefficient $B = –.221$ (standard error = .012; $t = 1.727$; $p = .005$), meaning that each additional coded challenge is associated with a 0.221-point drop in CGPA. Its standardized beta of –.254 shows this is the strongest effect in the model. Hours spent studying yield $B = .279$ ($SE = .040$; $t = 1.990$; $p = .048$; Beta = .220), indicating each extra study hour corresponds to a 0.279-point increase in CGPA, a significant benefit. The nature of the study environment has $B = –.061$ ($SE = .046$; $t = –1.340$; $p = .181$; Beta = –.080), which is not statistically significant and thus offers no reliable prediction of CGPA in the multivariate context. Tolerance values near 1 and VIFs close to 1 confirm multicollinearity is negligible.

In practical terms, these results underscore that academic challenges exert the most potent and detrimental impact on cadets' academic performance, more so than the positive contribution of additional study hours. Although dedicating time to study does bolster GPA, addressing systemic obstacles such as resource shortages or large class sizes may yield greater gains in overall student achievement.

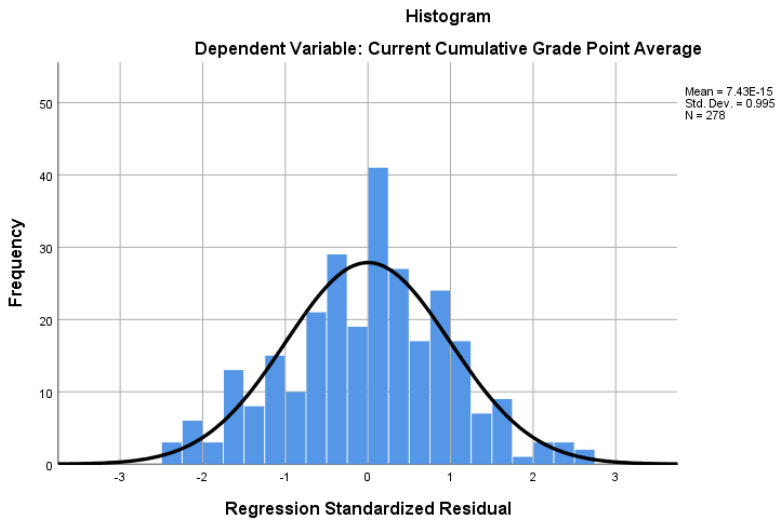

Figure 5: Histogram Plot of the Regression Standardized Residuals

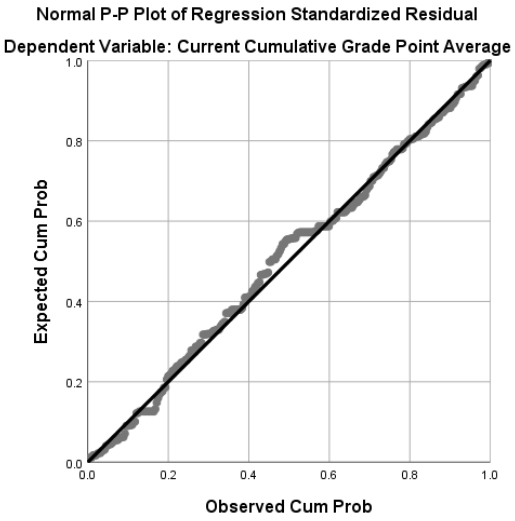

Figure 6: Normal P-P Plot of the Regression Standardized Residuals

Figures 5 and 6 show that residuals of the regression model follow the normal distribution (the points fall closely on the straight line and the curve on the histogram assumed the shape of a bromal distribution) and therefore substantiates the model as a valid model for prediction.

Chi-Square Test of Independence Results

One of the research objectives was to determine the association between the perceived relevance of training and overall satisfaction with the training experiences. The independent variable in this analysis is the perceived relevance of training, categorized as very relevant, somewhat relevant, not very relevant, and not at all relevant. The dependent variable is overall satisfaction with training, categorized as very satisfied, satisfied, neutral, dissatisfied, and very dissatisfied. The appropriate statistical method for this objective is the Chi-Square Test of Independence. This method is selected because both variables are categorical, and the chi-square test will assess whether there is a statistically significant association between how relevant cadets perceive the training to be and how satisfied they are with their training experience.

Table 8: Chi-Square Tests of Independence between Overall Training Satisfaction and Relevance of Training Programs

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	39.941[a]	16	.001
Likelihood Ratio	36.137	16	.003
Linear-by-Linear Association	25.768	1	.000
N of Valid Cases	278		

a. 16 cells (64.0%) have expected count less than 5. The minimum expected count is .01.

As shown in Table 7, the Pearson Chi-Square value is 39.941 with 16 degrees of freedom, and the corresponding p-value is .001. Since the p-value is less than the conventional significance level of .05, the null hypothesis is rejected. This indicates a statistically significant association between how cadets perceive the relevance of their training and how satisfied they are with the overall training experience.

Further supporting this finding, the Linear-by-Linear Association test yielded a value of 25.768 with a p-value of .000. This result suggests a clear ordinal relationship, meaning that as the perceived relevance of training increases, cadets' satisfaction levels also tend to increase in a linear fashion. These results indicate a significant relationship between the perceived relevance of training and overall satisfaction among cadets.

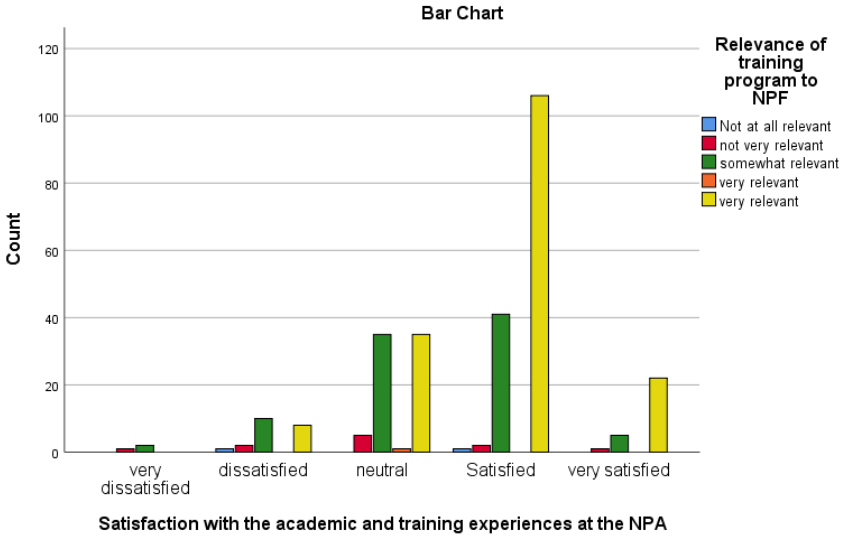

Figure 7: Multiple Bar Chart of Satisfaction Level and Relevance of Training Program to NPF

Effective Training Method Preferred by Cadets.
Part of the objective of the study is to identify the most effective training method preferred by cadets. The variable of interest is the preferred training method, which is categorical and includes options such as lectures, practical exercises, simulations, field training, and others. The appropriate statistical method for this analysis is descriptive statistics, specifically frequencies and percentages. This method is chosen because it effectively summarizes how many respondents selected each training method, thereby highlighting the most and least preferred methods among the cadets.

Table 9: Frequency Distribution of Training Method Preference

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	field training	95	34.2	34.2	34.2
	lectures	92	33.1	33.1	67.3
	practical exercises	77	27.7	27.7	95.0
	practical training	1	.4	.4	95.3
	simulations	13	4.7	4.7	100.0
	Total	278	100.0	100.0	

Table 9 presents the frequency distribution of training method preferences among cadets. According to the data, field training emerged as the most preferred method, with 95 cadets (34.2%) indicating it as their choice. This is closely followed by lectures, which were selected by 92 cadets (33.1%). Practical exercises were the next most popular, preferred by 77 cadets (27.7%). On the other hand, simulations and practical training were the least favored, with only 13 cadets (4.7%) and 1 cadet (0.4%) selecting them, respectively. Based on this distribution, it can be concluded that cadets view field training as the most effective training method, with lectures and practical exercises also receiving considerable support. The significantly lower preference for simulations and practical training suggests that these methods may not be perceived as effective or engaging by the majority of cadets. These insights from Table 4.8 can inform future decisions on training design, emphasizing the integration of more field-based and interactive methods to align with cadet preferences.

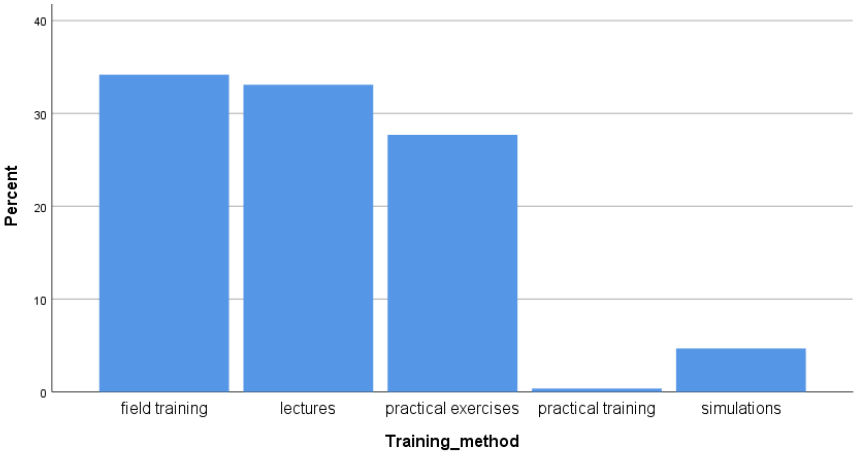

Figure 8: Simple Bar Chart of Preference of Training Methods at Nigerian Police Academy, Kano

Ordinal Logistic Regression Results

Another objective is to analyze the factors that affect overall satisfaction with academic and training experiences. The independent variables include the availability and quality of training facilities (categorized as Yes, No, or Sometimes), the study environment (categorized similarly as Yes, No, or Sometimes), academic challenges (represented as dummy variables for inadequate teaching resources, large class sizes, lack of qualified instructors, and personal issues), and the preferred training method (categorized as lectures, practical exercises, simulations, or field training). The dependent variable is the overall satisfaction with academic and training experiences, measured on an ordinal scale: very satisfied, satisfied, neutral, dissatisfied, and very dissatisfied. The appropriate statistical method for this objective is ordinal logistic regression. This method is suitable because it accounts for the ordered nature of the satisfaction variable and allows for the identification of which academic and training factors significantly influence satisfaction levels.

Table 10: Ordinal Logistic Regression Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	623.439			
Final	499.490	123.949	27	.000

Link function: Logit.

The results from Table 10 show that the model's -2 Log Likelihood decreased significantly from 623.439 in the intercept-only model to 499.490 in the final model. The Chi-Square value associated with this difference is 123.949 with 27 degrees of freedom and a significance level of .000. This indicates that the final model fits significantly better than the null model, suggesting that the included variables help explain variations in cadets' satisfaction levels.

Table 11: Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	1182.643	829	.000
Deviance	480.213	829	1.000

Link function: Logit.

In Table 11, the goodness-of-fit statistics are presented. The Pearson Chi-Square value is statistically significant, indicating a lack of perfect model fit. However, the Deviance statistic is non-significant with a p-value of 1.000, suggesting that the model does not significantly deviate from the observed data. Such mixed results are not uncommon in complex ordinal regression models, particularly when dealing with many categorical predictors.

Table 12: Pseudo R-Square

Cox and Snell	.360
Nagelkerke	.399
McFadden	.192

Link function: Logit.

Table 12 provides pseudo R-squared values, with the Nagelkerke R^2 of .399 indicating that approximately 40 percent of the variance in satisfaction is explained by the model. This represents a moderately strong effect size within the context of social science research.

Table 13: Parameter Estimates

							95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	[Overall_satisfaction = 1.00]	-10.968	1.664	43.432	1	.000	-14.230	-7.706
	[Overall_satisfaction = 2.00]	-8.278	1.512	29.977	1	.000	-11.242	-5.315
	[Overall_satisfaction = 3.00]	-5.856	1.472	15.830	1	.000	-8.740	-2.971
	[Overall_satisfaction = 4.00]	-2.136	1.426	2.244	1	.134	-4.931	.659
Location	[Study_challenges=1.00]	-4.765	1.278	13.899	1	.000	-7.271	-2.260
	[Study_challenges=2.00]	-.580	.352	2.707	1	.100	-1.270	.111
	[Study_challenges=3.00]	1.463	1.031	2.013	1	.156	-.558	3.484
	[Study_challenges=4.00]	-3.356	1.537	4.767	1	.029	-6.369	-.343
	[Study_challenges=5.00]	-1.348	.752	3.208	1	.073	-2.822	.127
	[Study_challenges=6.00]	-.051	1.314	.002	1	.969	-2.627	2.525
	[Study_challenges=7.00]	-.821	.388	4.470	1	.035	-1.582	-.060
	[Study_challenges=8.00]	0[a]	.	.	0	.	.	.
	[Study_environment=.00]	-.953	.395	5.811	1	.016	-1.729	-.178
	[Study_environment=1.00]	-.054	.293	.033	1	.855	-.627	.520
	[Study_environment=2.00]	0[a]	.	.	0	.	.	.
	[Training_method=1.00]	-1.093	.702	2.425	1	.119	-2.469	.283

	Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
[Training_method=2.00]	-1.281	.713	3.233	1	.072	-2.678	.115
[Training_method=3.00]	-1.830	.708	6.674	1	.010	-3.218	-.442
[Training_method=4.00]	-1.378	2.364	.340	1	.560	-6.011	3.256
[Training_method=5.00]	0[a]	.	.	0	.	.	.
[Training_facility=.00]	-1.532	.348	19.386	1	.000	-2.214	-.850
[Training_facility=1.00]	-1.235	.354	12.199	1	.000	-1.928	-.542
[Training_facility=2.00]	0[a]	.	.	0	.	.	.
[Training_challenges=1.00]	-2.156	2.163	.993	1	.319	-6.395	2.084
[Training_challenges=2.00]	-.249	.434	.329	1	.566	-1.100	.602
[Training_challenges=3.00]	-1.517	.551	7.596	1	.006	-2.596	-.438
[Training_challenges=4.00]	-.328	.446	.541	1	.462	-1.202	.546
[Training_challenges=6.00]	0[a]	.	.	0	.	.	.
[Training_relevance=1.00]	-2.308	1.735	1.769	1	.184	-5.709	1.093
[Training_relevance=2.00]	-.628	.671	.874	1	.350	-1.944	.688
[Training_relevance=3.00]	-.868	.284	9.308	1	.002	-1.425	-.310
[Training_relevance=4.00]	-1.582	1.975	.642	1	.423	-5.454	2.289
[Training_relevance=5.00]	0[a]	.	.	0	.	.	.
[Study_habit=1.00]	-1.790	1.124	2.536	1	.111	-3.992	.413
[Study_habit=2.00]	-1.315	1.130	1.355	1	.244	-3.530	.900
[Study_habit=3.00]	.233	1.206	.037	1	.847	-2.131	2.596
[Study_habit=4.00]	-2.257	1.775	1.615	1	.204	-5.736	1.223
[Study_habit=5.00]	0[a]	.	.	0	.	.	.

Link function: Logit.

a. This parameter is set to zero because it is redundant.

Table 13 presents the parameter estimates; several predictors were found to significantly influence overall satisfaction. Among the study challenges, cadets who reported food problems, coded as 1, had significantly lower odds of being satisfied with their training experience. The estimate for this category was -4.765 with a p-value of less than .001, highlighting that food-related issues strongly diminish overall satisfaction. Similarly, lack of food, coded as 4, was also associated with lower satisfaction levels, with an estimate of -3.356 and a significance level of .029. These results underscore the importance of addressing basic needs in promoting a positive academic and training experience. Large class sizes, coded as 7, also had a significant negative effect on satisfaction (estimate = -0.821, p = .035), suggesting that overcrowded learning environments hinder cadet satisfaction. Other study challenges, including inadequate teaching resources and lack of qualified instructors, were not statistically significant at the 0.05 level but showed a negative direction in their effect, suggesting a potential impact that did not reach significance within this model.

In relation to the study environment, cadets who reported having no supportive study environment, coded as 0, showed significantly lower satisfaction levels compared to those with a supportive environment. The estimate was -0.953 with a significance level of .016, indicating that a conducive environment is important for cadet satisfaction. Those who reported "sometimes" having a good study environment did not differ significantly from those who reported always having one.

The preferred training method also influenced satisfaction. Preference for practical exercises, coded as 3, was significantly associated with lower satisfaction levels (estimate = -1.830, p = .010) when compared to simulations, the reference group coded as 5. Although practical exercises were among the most preferred methods in descriptive results, these regression findings suggest they may not be yielding the expected levels of satisfaction, potentially due to implementation issues. Preferences for lectures (coded 2) and field training (coded 1) also had negative coefficients with p-values of .072 and .119, respectively. While not statistically significant at the conventional 0.05 threshold, these results hint at dissatisfaction with traditional or physically demanding methods when compared to simulations.

Training facility availability was another strong predictor of satisfaction. Cadets who reported having no access to training facilities (coded 0) had significantly lower satisfaction (estimate = -1.532, $p < .001$) compared to those with full access (coded 2). Those who had only partial or occasional access (coded 1) also reported lower satisfaction (estimate = -1.235, $p < .001$). These findings point to the central role of training infrastructure in shaping the overall experience of cadets.

Training challenges also contributed to satisfaction levels. Among these, a lack of experienced trainers, coded as 3, had a significant negative effect on satisfaction, with an estimate of -1.517 and a p-value of .006. This suggests that trainer quality is a crucial factor influencing how cadets evaluate their training. Other training challenges, such as field training difficulties, safety concerns, and physical demands, were not statistically significant, although they all showed negative trends in their estimates.

Training relevance was another important predictor. Cadets who perceived their training as only somewhat relevant (coded as 3) had significantly lower satisfaction than those who perceived it as very relevant (coded as 5). The estimate was -0.868 with a p-value of .002. Although other categories of training relevance (coded as 1, 2, and 4) showed negative estimates, only this category was statistically significant, suggesting that perceived relevance plays a meaningful role in shaping overall training satisfaction.

Study habits, measured by hours spent studying per week, did not show statistically significant effects on satisfaction. While

those who studied fewer hours (coded as 1 and 2) had negative estimates, and those in the 16–20 hour category (coded as 4) had a more pronounced negative effect (estimate = -2.257), none of these coefficients reached statistical significance. This suggests that while study habits may influence academic performance, they do not directly affect cadets' satisfaction with their training and academic experience, at least not within the scope of this model.

CONCLUSION

This research provides valuable insights into the determinants of academic achievement and training satisfaction at the Nigeria Police Academy, Kano. The notable positive link between study hours and CGPA, however modest, underscores the importance of committed study time for academic achievement. The significant adverse impact of academic problems on CGPA highlights essential areas necessitating institutional intervention.

The regression analysis identifies academic problems as the most significant negative predictor of academic success, highlighting the necessity of overcoming these impediments to improve cadet outcomes. The obstacles outlined in the proposals presumably include resource constraints, elevated student-to-faculty ratios, and limited access to educational resources, all of which can substantially hinder academic advancement. The significant correlation shown between the perceived importance of training and overall satisfaction is an essential discovery for enhancing the training program. Cadets' satisfaction scores markedly rise when they view their training as directly relevant to the practicalities of police. This underscores the necessity of meticulously matching training programs with the real requirements of law enforcement within the Nigerian setting. The strong preference for field training among cadets underscores the significance of experiential, hands-on learning methods. The diminished preference for simulations and practical training suggests a necessity to reassess the design and implementation of these techniques to improve their engagement and efficacy. The substantial logistic regression model indicates that overall satisfaction is a complex concept influenced by the interaction of academic and training-related elements. Investigating the particular variables that most strongly influence this model might provide deeper insights for targeted actions.

This study concludes that academic and training-related factors significantly impact cadets' performance and happiness at the Nigerian Police Academy. Although persistent study habits enhance CGPA, academic problems including inadequate resources or big class numbers are more significant factors in academic decline. Moreover, cadets' contentment with training is profoundly affected by their assessment of its pertinence, and they demonstrate a marked inclination towards experiential, practical teaching approaches.

The study recommends further study on more advance prediction methods as in Yakubu et al. (2024). prediction methods needs to be employed too.

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