Patrol Officers' Emotional Intelligence as a Predictor of Success

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Executive Summary

Professional organizations interested in identifying "star performers" are comparing the results of Emotional Intelligence (EI) tests with job-related performance measures. Emotional intelligence covers areas such as interpersonal relationships, stress management, and decision making. Patrol officers work under stressful and risky conditions, making EI critical to success. Comparing EI scores with supervisors' job performance ratings, this research examines whether there is a correlation between job performance and EI for patrol officers in the Greenville, North Carolina police department. Although this study found no relationship between EI and supervisors' performance ratings, these findings could impact the recruiting and promotion practices of police departments when determining how to rate their officers' performance.

I. Introduction

Law enforcement is society's response to a fundamental human need, the desire for safety and security. When it comes to protecting individual property, public property, and creating safe communities, the responsibility often rests in the hands of municipal police officers and their departments.

To do their jobs effectively, entry level officers need organizational support which is best provided though proper training, resources, development, and leadership. Officers with high emotional intelligence (EI) will often be more successful; characteristics such as impulse control, stress tolerance, problem solving, and the ability to build and maintain interpersonal relationships have been found to be predictors of high job performance and leadership skills (Turner 7). Patrol officers with a combination of organizational support and high EI will be valuable assets to the police department and the community (Turner 5). The hard part is finding this combination.

To be successful, patrol officers must possess the right skill-set. These skills are usually tested during the recruiting phase and include physical aptitude, policing procedural knowledge, and mental well-being (US Bureau of Labor 1). Many studies have been done on physical aptitude and mental well-being, but no published studies have looked at the emotional intelligence of patrol officers in relation to supervisors' performance ratings.

Officers rated as high performers are referred to as "star performers." While there is data comparing skills and EI factors (Saville 1), they do not provide a complete profile of the officer. Little statistical data on emotional intelligence of patrol officers exists (Turner 8). This paper aims to identify a profile of star performers, based on EI and performance ratings for patrol officers in the Greenville NC Police Department.

II. Background

Recruiting, retaining, and promoting officers have become increasingly important to police departments. Retaining police officers is a problem throughout the nation, and North Carolina is not immune to this problem; NC law enforcement agencies have an annual turnover rate of 14.2 percent (Yearwood iv). Training of new recruits requires significant resources in both time and money (Koper 3).

High turnover rates and resources needed to train new recruits make it imperative for police departments to ensure they are hiring patrol officers with a high likelihood of being successful. Physical ability tests are common for every police department in the hiring stage, as well as psychological tests (US Bureau of Labor 1), but Emotional Intelligence tests are not (Saville 1).

What is Emotional Intelligence?

Emotional intelligence is the "ability to monitor one's own and other's feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action" (Salovey and Mayer 189). Emotional intelligence is important in the field of law enforcement because patrol officers are highly engaged with the public, encounter high-pressure situations, and need strong problem-solving skills.

Emotional Intelligence tests have been successfully used in various professions to identify star performers, two examples include:

- Debt collection- The highest performer collectors had an average goal attainment of 163 percent over a three month period; the average employee achieved 80 percent. The high

performers scored significantly higher on the EI factors of optimism, self-actualization, and independence (Cherniss 4).

- In a national insurance company, insurance sales agents who were weak in emotional competencies such as self-confidence, initiative, and empathy sold policies with an average premium of $54,000. Those who were very strong in at least 5 of 8 key emotional competencies sold policies worth $114,000 (Cherniss 2).

How can EI be used by Police Departments?

Police departments have a tough time predicting which sworn patrol officers will be star performers. Predictive profiles of successful patrol officers do not exist, unlike other professions, but an accurate reliable profile could benefit law enforcement agencies in recruiting and promotion (Police Chief Magazine 2).

Literature suggests one way to identify, develop and nurture future leaders is through studies to determine profiles of star performers (Gaston 108). In Turner's study two law enforcement "star performer" groups were identified and compared: FBI National Academy graduates and law enforcement leaders. The FBI National Academy is by invitation only, though nominations are accepted from law enforcement officials. Attendees are commonly the senior executive leader or in a high-ranking leadership position before they attend the academy. FBI National Academy graduates are half of one percent of the law enforcement population; sixty-eight and one-half percent possess a bachelor's degree and average 19 years of law enforcement experience. Law enforcement leaders were notified by word of mouth, from other Sheriffs, Chiefs, and law enforcement leadership organizations. Thirty percent of the studies participants had a bachelor's degree and varying years of experience. Turner compared these two groups EI to the general population, and also against each other. He found that both of the law enforcement groups had statistically significant higher EQi scores than the general population, but also found that the graduates of the FBI National Academy had statistically significant higher EQi scores than the law enforcement leaders (126).

By coupling performance ratings by officers' supervisors with the EQi 2.0 test we expect to identify which current patrol officers would be strong candidates for promotion. Such a profile would assist police supervisors during the recruiting phase where candidates' EI scores along with other assessment results could be compared to a predictive profile of a star performer.

In the past decade, some police departments have administered EI tests to their patrol officers. They were tested so officers could understand their strengths and weaknesses, and create plans to improve their weaknesses. This Capstone is the first study of a police department's patrol officers that examines Supervisor's performance ratings, through the Command Feedback Form (CFF) and EQi 2.0 test. The CFF was created by Developmental Associates, Inc. of Raleigh, NC and is a job analysis of the patrol officer position created by a law enforcement expert. The form allows supervisors to confidentially rate their subordinates on 37 performance metrics (Appendix A). No studies currently exist using the CFF and EQi 2.0, but other professions have used their own performance ratings and EQi tests to identify star performers (Cherbosque 9-13). The new EQi 2.0 differentiates from the original in a few ways. First, the adaptability scale was renamed the decision-making scale, and this now includes impulse control, rather than flexibility. Secondly, in the previous version's intrapersonal scale the emotional self-awareness subscale contained self-awareness and self-expression statements, the new test created a self-perception and self-expression scale where those new items reside, respectively. Last, the EQi 2.0 changed the definition of its problem solving subscale to remove interpretation issues. It is now "less about using a linear pragmatic approach and more about the ability to find solutions to problems in situations where emotions are involved" (Multi-Health Systems, Inc) (Appendix G).

This study sought to test the following null hypotheses:

H_1 Based on a correlation test, patrol officer's ratings on the CFF do not correlate with their EQi 2.0 score, both overall and on the individual variables.
H_2 In regression testing, "Star Performers", as determined by the CFF, and EQi 2.0 scores are not correlated.

II. Methodology

The participating police department in this study, from Greenville, North Carolina, agreed to this research. Six Sergeants were asked to rate the patrol officers they supervise, which totaled 89 officers, and resulted in 75 responses. The focus of this study is on patrol officers with their immediate supervisors, Sergeants, playing an integral role in providing data.

This study was IRB approved. All data was stripped of identifiers and the results are presented in aggregate form. Individual results were not shared with subjects or supervisors (Appendix H). The mean patrol officer respondent was 34 years old, male, and with 8 years of law enforcement experience.

The Sergeants were asked to complete a confidential, online Command Feedback Form (CFF). The scores from this instrument were then used to divide the patrol officers into quartiles – star performers (top 25%), average performers (middle 50%), and lowest performers (bottom 25%). No participating Greenville patrol officers, nor their supervisors, know which performance group they were assigned to.

The patrol officers were asked by Developmental Associates (Drs. Korrel Kanoy and Heather Lee) to voluntarily, take the Emotional Quotient Inventory 2.0 (EQi 2.0) test. The EQi 2.0 has been used to predict performance in a variety of professions, including law enforcement. The test uses a five-point Likert scale to score participants' responses to various statements based on five EI scales, shown below, and 15 subscales (Appendix A).

- Self Perception, Self Expression, Interpersonal, Decision-Making, Stress Management

All officers were sent, via email, an informed consent form (Appendix B). The officers had the option to complete the EQi 2.0 on-line, which takes 15-20 minutes, or to decline to participate. 75 officers participated. The non-participants were not at the classification level of full-time patrol officer.

This study differed than other star performer studies because of the tool used to measure performance. Unlike Turner's study, where participants were already high-ranking, experienced law enforcement officers, this sample only involved one department and solely officers at the patrol level. While Turner's participants were all perceived to be high performers, Greenville's officers, overall, have less experience and education. The CFF uses performance metrics as a way to identify the star performers, but these metrics are more qualitative rather than quantitative, making it more difficult to have an accurate assessment of the patrol officer's performance.

Once the CFF and EQi 2.0 scores were collected the results were matched for each patrol officer in a data set. A performance score was generated for each officer by taking the mean score of the performance metrics they were rated on by their supervisor in the CFF.

The CFF results were then compared to the EQi 2.0 results, using R-Square, ANOVAs and t-tests, to determine if a statistically significant relationship existed between emotional intelligence and job performance rating on the CFF.

III. Analyses

Descriptive statistics were used to determine the low, high, and mean performance score of the participants, which was on a five-point Likert scale, see results in Table 1 below:

Table 1: CFF Results Descriptive Statistics

CFF	N	Minimum	Maximum	Mean	Std. Dev.
Performance score	75	1.21	3.77	2.6679	.62032

The performance score of the CFF was tested against the EQi 2.0 total score, as well as the individual variables, but four were of primary interest because of past studies linking EI and performance (Turner 5), they were: Social Responsibility, Problem Solving, Self-Actualization, and Interpersonal Relations.

To examine the association between performance and emotional intelligence, correlational analyses were performed. A correlation provides a number that describes the strength of a relationship between two variables.

Regression tests were then completed to control for individual variables. Three tests come out of the regression:

- R-Square: The adjusted R-Squared gives a score that details how predictive the model is. A score of 1.0 means it is perfectly predictive, a score of 0 means it is not predictive at all. Anything below 0 reflects an inverse relationship.
- ANOVAs: This test analyzes variance. The top and bottom quartiles of the performance scores were compared, as well as the top and bottom thirds. Both levels of analysis were completed to see if either breakdown yielded a statistically significant result.
- T-Tests: These tests measure how much each variable predicts the performance score when controlling for the other variables.

IV. Findings

From the analysis of the data, the correlation or regression tests would determine if EI was linked to performance

The correlation tests found none of the EQi 2.0 subscale scores were correlated with performance (Appendix D). Therefore, Hypothesis 1- Based on a correlation test, patrol officer's ratings on the CFF do not correlate with their EQi 2.0 score, both overall and of the individual variables-is confirmed.

The regression tests (Appendix E) also showed no correlation between the EQi 2.0 scores and the "star performers", thus Hypothesis 2- In regression testing, "Star Performers", as determined by the CFF, and EQi 2.0 scores are not correlated- is confirmed.

The model showing the results of four of the variables projected to be statistically significant, Social Responsibility, Problem Solving, Self-Actualization, and Interpersonal Relations, were all found to have no statistical significance (Appendix G)

Correlation and regression tests were used to increase the number of chances to identify a relationship, and one test controlled for all variables, but every test confirmed that there was no link between the EI variables and CFF performance scores.

Study Limitations and Future Steps

This study is unique because it was the first to take the Command Feedback Form as a performance metric and compare it to the EQi 2.0 test. The CFF was developed and licensed by Developmental Associates, Inc., and the EQi 2.0 is the newest version of Bar-On's EQi, released in July 2011. There are no previous studies using these assessments with this population to compare this study to, offering little precedence for this study. Despite this, previous studies on emotional intelligence in law enforcement gave us some basic indication as to what EI factors could be linked to performance, yet our results yielded no significant correlation.

Possible explanations as to why this happened are: specific questions on the performance metric, (the CFF) did not correspond with EI scales. For instance, the CFF included questions involving grooming habits, off-duty accessibility and actions, and negatively worded questions. These questions do not necessarily involve the officer's performance and their inclusion in the performance rating could have affected the statistical results. Further research can omit some of these questions or control for them, but that involves more in-depth statistical analysis.

A factor analysis would allow extraction of specific questions deemed less relevant to performance. A new performance scale would be created, which could then go through correlation and regression tests to see if the new scale finds a link between EI and patrol officer performance. These tests will be conducted in the near future by Developmental Associates, LLC.

The other reason no correlation was found could be due to the small sample size. This study had a pool of 89 patrol officers, and 75 respondents. A study involving school administrators and emotional intelligence completed in 2005 had a sample size of 464, with a 40/60 split of men and women (Stone 5). A broader sampling, such as multiple departments across different regions, would cover a wider population and possibly more precision for this study.

V. Conclusions

The aim of this Capstone was to identify a profile of star performers at the level of patrol officer, based on emotional intelligence and performance ratings, in the Greenville, NC police department. Analyses of the full CFF and EI 2.0 showed that there was no predictive profile of star performers. Continuing work with this data set and additional statistical methods that break this data down further may yet identify a correlation between components of EI and patrol officer performance. For police departments interested in improving their recruiting and promotion practices EI can be a useful tool, but police departments would benefit from waiting for further studies on the utility of using EI before making it a component of their hiring and promotional process.

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APPENDIX A

Emotional Quotient Inventory 2.0

NOT ACTUAL ASSESSMENT

The Emotional Quotient Inventory 2.0 is a well-normed, reliable and valid tool used to assess emotional intelligence (EI). The EQi 2.0 has been used to predict future performance in a variety of fields, including law enforcement leaders.

The EQi contains five composite scales (show in bold) and 15 subscales as shown below. The example items shown below are illustrative of all items on the assessment. Because access to the EQi is protected by copyright laws, a full copy cannot be provided. The individual answers each item along a 5-point likert scale from "this is rarely or never true for me" to "this is always or almost always true for me." To prevent response bias, some items are negatively worded.

Self Perception

- Emotional self-awareness
  - It's hard for me to understand the way I feel.
- Self-regard
  - I feel sure of myself in most situations.
- Self-actualization
  - I try to continue and develop those things I enjoy.

Self Expression

- Emotional self-expression
  - It's fairly easy for me to express my feelings.
- Assertiveness
  - When I disagree with someone, I am able to say so
- Independence
  - I prefer a job in which I'm pretty much told what to do.

Interpersonal

- Interpersonal Relationships
  - I don't keep in touch with my friends.
- Empathy
  - I'm good at understanding the way other people feel.

- Social Responsibility
    - Others find it hard to depend on me.

Decision-Making

- Reality Testing
    - I can easily pull out of daydreams and tune into the reality of the immediate situation.
- Problem Solving
    - My approach to overcoming difficulties is to move step by step.
- Impulse Control
    - I'm impatient.

Stress Management

- Stress Tolerance
    - I believe that I can stay on top of tough situations.
- Flexibility
    - It's difficult for me to begin new things.
- Optimism
    - I'm generally motivated to continue, even when things get difficult.

There is also a happiness subscale (ex. I am satisfied with my life), but this subscale is not included in the overall EQi score or any subscale.

APPENDIX B

Command Feedback FORM

Police Officer Position

(to be completed by the supervising Sergeant)

NOTE to Human Subjects Committee: Once this research is approved, the questions below will be uploaded to empliant, an online survey tool.

Confidentiality Notice Your individual responses are confidential and will not be shared with the Greenville Police Department or the subordinate employee. It is important that you answer each question honestly from your perspective as a supervisory member of the GPD and based on your direct observations of the subordinate.

Directions: As the rater, you will answer questions pertaining to your subordinate employee by selecting the best response from the following list of responses. You will be provided descriptive examples of employee behavior on the job and you will select the best response based on your observations of the performance of the employee.

Employee First Name: _____

Employee Age:

Employee Gender:

Employee Length of Service with GPD _____ years and _____ months

Employee Length of Service in law enforcement (skip if you do not know). _____ years and _____ months

<u>Performance Ratings</u>

N/A – Not Applicable (Task does not apply in the employee's current role and/or rater has not had the opportunity to observe in the past 12 months.)
Never/Rarely
Occasionally
Sometimes
Often
Always/Almost Always

1. The officer is professional in dress. His/her uniforms (includes plain clothes and uniformed personnel) are clean and neat and presents a positive impression of the officer in the department and the public.
2. The officer engages in the following safety-oriented practices:
    a. Maintaining good physical fitness
    b. Maintains departmental equipment is a good state of operational readiness
    c. Practices safe driving skills
    d. Engages in good officer safety practices in the field
    e. Wears his/her ballistic vest
3. The officer has goals and aspirations for advancement and growth in the profession.
4. The officer is able to keep his/her individual emotions in check when situations arise inside the organization when he/she is in disagreement.
5. The officer:
    a. Needs little direction from supervisors.
    b. Is a self-starter.
    c. Can be counted to get the job done by the time it is due.
    d. Takes the initiative and sees things that need to be done
    e. Uses work time productively
6. The officer stands up for what he/she believes in a constructive and non-threatening manner.
7. The officer actively seeks developmental opportunities (external training, formal education, self-directed study, professional certifications) without being prompted by the supervisor or department.
8. The officer is seen as a resource among his/her peers and other officers often seek his/her opinion on matters pertaining to field duties and responsibilities.
9. The officer possesses good job knowledge and desires to learn more about his/her professional duties.
10. The officer's reports are thorough and seldom have to be returned for additional work.
11. The officer's reports are generally well written and free from grammatical and spelling errors.
12. The officer completes traffic and criminal investigations thoroughly.
13. He/she takes necessary actions to protect crime and traffic crash scenes.
14. The officer enforces criminal and traffic laws in a satisfactory manner.
15. The officer is professional in situations internal to the organization (utilizes and respects the chain of command, willingly assists fellow employees, treats subordinate and civilian employees with respect).
16. The officer is professional in situations external to the organization (seeks opportunities to serve the community, sees the residents as customers of policing services, is courteous in contacts with citizens, is respectful of minority and special interest groups).
17. The officer provides good service (often above and beyond the call of duty) to the residents of the community (keeps complainants informed, return phone calls and e-mails promptly) and seldom has to be prompted to follow-up on cases by supervisory personnel.

18. The officer is able to get needed information from witnesses and confessions from suspects during interview and interrogations.
19. The officer exhibits respect for the rights of victims, suspects, and members of the public.
20. He/she does not violate the rights of suspects during arrest, search or seizures.
21. The officer is involved in the community outside of the job (coaches' team sports, volunteers in schools or civic clubs).
22. The officer is accessible during his/her days off.
23. The officer abides by departmental policy and state law in his/her daily work.
24. I would characterize the officer as having integrity.
25. The officer actively seeks opportunities to engage in problem-solving activities with community groups and individuals.
26. The officer takes a preventive approach to policing by engaging in community policing, identifying crime trends, willingly utilizes crime mapping and crime analysis data, and uses agency/city experts for assistance.
27. The officer uses technology effectively in his or her job.
28. I am unaware of any substantiated off-duty conduct on the part of the officer that would likely reflect negatively on the police department if it were to become public (does not have affairs, has good personal relationships, appropriate use of social media, does not drink & drive, does not frequent establishments or people that could give the department a black eye). **Scored on an agree-disagree scale.**
29. The officer handles change well and does not overreact to last minute assignment changes, changes in departmental policies and procedures, or schedule changes.
30. The officer maintains composure during stressful field situations (emergency and/or crisis events).
31. The officer makes good decisions during stressful field situations (emergency and/or crisis events).
32. The officer maintains a positive attitude about the job, department, and the community.
33. He/she rarely engages in locker room gripe sessions or the spreading of rumors in the department.
34. During periods of low organizational morale, the employee is a positive influence on others and sees the positive side of the job, department, organizational change, and the community.
35. The officer quickly sizes up facts and situations in the field.
36. The officer is objective and able to see both sides of an issue when dealing with individuals who have competing interests.
37. When the officer gets emotional about a departmental issue, he/she is able to remain objective and responds in a manner that encourages constructive solutions.
38. The officer is a _____ year veteran of the Greenville Police Department and has ____ total years of law enforcement experience.
39. The officer is _____ years of age.
40. The officer has the following level of education (select only one response to reflect the highest level achieved):
    a. High School or Equivalent
    b. Some College or Currently Enrolled
    c. Associate's Degree
    d. Bachelor's Degree

e. Master's Degree
f. Doctorate Degree

41. Final Question: I supervise ____ police officers and this individual ranks ____ in my opinion. (Note: A ranking of 1 indicates that this individual is the best all-around police officer that you supervise. Please assign each number only one time.)

APPENDIX C
CFF Performance Scores- Descriptive Statistics

```
DESCRIPTIVES VARIABLES=Perfscore
  /STATISTICS=MEAN STDDEV MIN MAX.
```

Descriptives

```
[DataSet1] J:\Capstone\Merged with perfscore.sav
```

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Perfscore	75	1.21	3.77	2.6679	.62032
Valid N (listwise)	75				

```
FREQUENCIES VARIABLES=Perfscore
  /ORDER=ANALYSIS.
```

Frequencies

```
[DataSet1] J:\Capstone\Merged with perfscore.sav
```

Statistics

Perfscore

N	Valid	75
	Missing	0

APPENDIX D

Correlation Tests of CFF Performance scores with individual variables.

Correlations

		Perfscore
TOT_R	Pearson Correlation	-.045
	Sig. (2-tailed)	.699
	N	75
SP_R	Pearson Correlation	-.085
	Sig. (2-tailed)	.467
	N	75
SR_R	Pearson Correlation	-.096
	Sig. (2-tailed)	.412
	N	75
SA_R	Pearson Correlation	.116
	Sig. (2-tailed)	.324
	N	75
ES_R	Pearson Correlation	-.149
	Sig. (2-tailed)	.203
	N	75
SE_R	Pearson Correlation	-.068
	Sig. (2-tailed)	.560
	N	75
EE_R	Pearson Correlation	.035
	Sig. (2-tailed)	.765
	N	75
AS_R	Pearson Correlation	-.068
	Sig. (2-tailed)	.561
	N	75
IN_R	Pearson Correlation	-.178
	Sig. (2-tailed)	.127
	N	75
IS_R	Pearson Correlation	.003
	Sig. (2-tailed)	.982
	N	75
IR_R	Pearson Correlation	.100
	Sig. (2-tailed)	.393
	N	75
EM_R	Pearson Correlation	-.097
	Sig. (2-tailed)	.408
	N	75

Variable Legend

TOT	Total Score
SP	Self-Perception
SR	Self-Regard
SA	Self-Actualization
ES	Emotional Self-Awareness
SE	Self-Expression
EE	Emotional Expression
AS	Assertiveness
IN	Independence
IS	Interpersonal
IR	Interpersonal Relationships
EM	Empathy

Correlations

		Perfscore
RE_R	Pearson Correlation	.027
	Sig. (2-tailed)	.817
	N	75
DM_R	Pearson Correlation	-.049
	Sig. (2-tailed)	.679
	N	75
PS_R	Pearson Correlation	-.015
	Sig. (2-tailed)	.902
	N	75
RT_R	Pearson Correlation	-.192
	Sig. (2-tailed)	.098
	N	75
IC_R	Pearson Correlation	.086
	Sig. (2-tailed)	.461
	N	75
SM_R	Pearson Correlation	-.078
	Sig. (2-tailed)	.507
	N	75
FL_R	Pearson Correlation	-.050
	Sig. (2-tailed)	.670
	N	75
ST_R	Pearson Correlation	-.119
	Sig. (2-tailed)	.310
	N	75
OP_R	Pearson Correlation	-.023
	Sig. (2-tailed)	.845
	N	75
HA_R	Pearson Correlation	-.047
	Sig. (2-tailed)	.691
	N	75

Variable Legend

RE	Social Responsibility
DM	Decision Making
PS	Problem Solving
RT	Reality Testing
IC	Impulse Control
SM	Stress Management
FL	Flexibility
ST	Stress Tolerance
OP	Optimism
HA	Happiness

APPENDIX E

Regression Tests Controlling for Individual Variables

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Perfscore
  /METHOD=ENTER SP_R SE_R IS_R DM_R SM_R.
```

Regression

```
[DataSet1] C:\Users\Bwitcher\AppData\Local\Microsoft\Windows\Temporary Interne
t Files\Low\Content.IE5\C2OGN0P6\Merged%20with%20perfscore[1].sav
```

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	SM_R, DM_R, IS_R, SP_R, SE_R	.	Enter

a. All requested variables entered.

b. Dependent Variable: Perfscore

Variable Legend

SM- Stress Management

DM- Decision-Making

IS- Interpersonal

SP- Self-Perception

SE- Self- Expression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.120[a]	.014	-.057	.63778

a. Predictors: (Constant), SM_R, DM_R, IS_R, SP_R, SE_R

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.408	5	.082	.201	.961[a]
	Residual	28.067	69	.407		
	Total	28.475	74			

a. Predictors: (Constant), SM_R, DM_R, IS_R, SP_R, SE_R

b. Dependent Variable: Perfscore

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.946	.979		3.008	.004
	SP_R	-.002	.004	-.065	-.363	.718
	SE_R	-.003	.013	-.042	-.207	.836
	IS_R	.007	.010	.108	.656	.514
	DM_R	-.001	.012	-.015	-.092	.927
	SM_R	-.004	.015	-.063	-.251	.803

a. Dependent Variable: Perfscore

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Perfscore
  /METHOD=ENTER RE_R PS_R SA_R IR_R.
```

Regression

```
[DataSet1] C:\Users\Bwitcher\AppData\Local\Microsoft\Windows\Temporary Interne
t Files\Low\Content.IE5\C2OGN0P6\Merged%20with%20perfscore[1].sav
```

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	IR_R, PS_R, RE_R, SA_R	.	Enter

a. All requested variables entered.

b. Dependent Variable: Perfscore

Variable Legend

IR-Interpersonal Relationships

PS- Problem Solving

RE- Social Responsibility

SA- Self-Actualization

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.188[a]	.035	-.020	.62638

a. Predictors: (Constant), IR_R, PS_R, RE_R, SA_R

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.009	4	.252	.643	.633[a]
	Residual	27.465	70	.392		
	Total	28.475	74			

a. Predictors: (Constant), IR_R, PS_R, RE_R, SA_R

b. Dependent Variable: Perfscore

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.810	.957		2.937	.004
	RE_R	-.032	.035	-.163	-.921	.360
	PS_R	-.027	.029	-.136	-.953	.344
	SA_R	.034	.027	.267	1.265	.210
	IR_R	.010	.022	.070	.468	.641

a. Dependent Variable: Perfscore

APPENDIX F

ANOVAs Regression Test

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
TOT_R	Between Groups	137.609	1	137.609	.076	.784
	Within Groups	59480.562	33	1802.441		
	Total	59618.171	34			
SP_R	Between Groups	807.608	1	807.608	.641	.429
	Within Groups	41574.278	33	1259.827		
	Total	42381.886	34			
SR_R	Between Groups	499.098	1	499.098	.929	.342
	Within Groups	17722.444	33	537.044		
	Total	18221.543	34			
SA_R	Between Groups	19.330	1	19.330	1.076	.307
	Within Groups	592.670	33	17.960		
	Total	612.000	34			
ES_R	Between Groups	7.010	1	7.010	.400	.532
	Within Groups	578.876	33	17.542		
	Total	585.886	34			
SE_R	Between Groups	10.794	1	10.794	.162	.690
	Within Groups	2195.778	33	66.539		
	Total	2206.571	34			
EE_R	Between Groups	.707	1	.707	.022	.884
	Within Groups	1076.265	33	32.614		
	Total	1076.971	34			
AS_R	Between Groups	.121	1	.121	.018	.895
	Within Groups	225.765	33	6.841		
	Total	225.886	34			
IN_R	Between Groups	18.490	1	18.490	1.481	.232
	Within Groups	412.082	33	12.487		
	Total	430.571	34			
IS_R	Between Groups	.897	1	.897	.007	.933
	Within Groups	4079.503	33	123.621		
	Total	4080.400	34			
IR_R	Between Groups	.293	1	.293	.013	.911
	Within Groups	753.307	33	22.827		
	Total	753.600	34			
EM_R	Between Groups	1.029	1	1.029	.033	.858
	Within Groups	1044.971	33	31.666		
	Total	1046.000	34			

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
RE_R	Between Groups	2.018	1	2.018	.219	.643
	Within Groups	304.382	33	9.224		
	Total	306.400	34			
DM_R	Between Groups	2.361	1	2.361	.049	.825
	Within Groups	1574.382	33	47.709		
	Total	1576.743	34			
PS_R	Between Groups	.252	1	.252	.039	.845
	Within Groups	214.719	33	6.507		
	Total	214.971	34			
RT_R	Between Groups	9.324	1	9.324	.772	.386
	Within Groups	398.562	33	12.078		
	Total	407.886	34			
IC_R	Between Groups	4.079	1	4.079	.413	.525
	Within Groups	325.807	33	9.873		
	Total	329.886	34			
SM_R	Between Groups	57.978	1	57.978	.390	.537
	Within Groups	4904.993	33	148.636		
	Total	4962.971	34			
FL_R	Between Groups	22.145	1	22.145	1.089	.304
	Within Groups	670.827	33	20.328		
	Total	692.971	34			
ST_R	Between Groups	9.089	1	9.089	.426	.518
	Within Groups	703.882	33	21.330		
	Total	712.971	34			
OP_R	Between Groups	.011	1	.011	.000	.986
	Within Groups	1282.160	33	38.853		
	Total	1282.171	34			
HA_R	Between Groups	261.026	1	261.026	.487	.490
	Within Groups	17701.660	33	536.414		
	Total	17962.686	34			

```
RECODE Perfscore (1.21 thru 2.45=1) (2.47 thru 2.96=2) (3.00 thru 3.77=3) INTO thirds.
VARIABLE LABELS  thirds 'perfscore divided into thirds'.
EXECUTE.
ONEWAY TOT_R SP_R SR_R SA_R ES_R SE_R EE_R AS_R IN_R IS_R IR_R EM_R RE_R DM_R PS_R RT_R IC_R SM_R FL_R S
  /MISSING ANALYSIS
  /POSTHOC=TUKEY ALPHA(0.05).
```

APPENDIX G

Sample Regression Results

Table 2: R-Square Regression Test Results

R-Square Test	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.188	.035	-.020	.62638

Table 3: ANOVAs Regression Test Results

ANOVA	Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1 Constant	2.810	.957		2.937	.004
RE_R	-.032	.035	-.163	-.921	.360
PS_R	-.027	.029	-.136	-.953	.344
SA_R	.034	.027	.267	1.265	.210
IR_R	.010	.022	.070	.468	.641

APPENDIX H

IRB Approval Form

WILLIAM PEACE UNIVERSITY HUMAN SUBJECTS SUBCOMMITTEE (CHS)

(FORM A)

To Principal Investigator: The Human Subjects Subcommittee will need five (5) copies of your responses to the questions listed on this form. The complete proposal includes the prospectus and such items as consent forms, questionnaires and other documents necessary to conducting research. The proposal will be retained in the office of the Provost.

Date: 12/12/2011

1. Tentative Research Title: Emotional Intelligence as a Predictor of Success as a Police Officers

2. List the name and Faculty/Student status of the person(s) conducting the research.

   a. Principal Investigator : Korrel Kanoy
   b. Department: PSY
   c. Others: Heather Lee, Adjunct, Chief William Anderson, Greenville, NC Police Department

3. Proposed time span of research. December, 2011-April, 2012

4. In a paragraph or two, summarize the objectives of this research.

   The objective will be to determine the relationship between police officer performance as measured by a content valid Command Feedback Form (see attached, Appendix B) to their emotional intelligence as measured by the Emotional Quotient Inventory (EQi 2.0; see Appendix C) with its 5 composite scores and 15 subscales. Police officers are defined by rank within the Greenville Police Department, the site for the research. All police officers are supervised by a Sergeant who will complete a confidential, online Command Feedback form. Based on scores received on this instrument as assigned by the supervising sergeant, police officers will be divided into 3 groups – highest performers (top 20%) average performers (middle 60%), and lowest performers (bottom 20%). No one within the Greenville Police Department (GPD) will know who was assigned to each performance group. Performance data will be compared with emotional intelligence scores from the Emotional Quotient Inventory 2.0 (EQi 2.0) to determine the relationship between effectiveness as a police officer and emotional intelligence.

5. Who will be the research participants and how will they be recruited?
   Police officers in the Greenville Police Department will be the participants. All police officers in the department, a subset of whom are currently participating in a voluntary promotional process to the corporal rank, will be invited via an email from Drs. Kanoy and Lee to participate in the research. No one, including those participating in the promotional process, will be required to participate in the research study describe herein.

6. Describe the ways in which these people will participate.
   All participants will be sent, via email, an informed consent form (See Appendix A). After reading the study description and informed consent, police officers will choose to either complete the EQi on line (15-20 minutes) or decline participation by not completing the EQi online.

After reading the informed consent and providing an electronic signature -- if they agree to participate – they will be linked to the Emotional Quotient Inventory (EQi).

The Command Feedback Form, see attached, will be completed by the supervising sergeant. Demographic data including age, gender, dates of service at the GPD, and length of service in law enforcement will be collected on the Command Feedback Form.

7. Attendant risks* (indicate any physical, psychological, social, or privacy risks which participants may incur).

Participants will not see their scores as assigned by supervisors on the Command Feedback Form and thus will not know whether they scored in the top 20%, middle 60%, or bottom 20% compared with other police officers. In addition, the supervising sergeant will not be told which of the police officers they supervise fell into each of the three performance categories. The Command Feedback Form is being created for research purposes only and no one in GPD will see anyone's scores other than the sergeant who completes the Command Feedback Form.

Participants who choose to attend a group interpretation session at the conclusion of the study -- offered by the principal investigator -- will be able to see their individual scores on the EQi. The EQi carries a slight risk that someone will react unfavorably to his or her scores, particularly a low score. Those choosing not to participate in the group interpretation session will NOT receive their EQi scores according to the ethical guidelines established for administering and interpreting the EQi. These ethical guidelines are required by MHS because having someone receive scores without having an interpretation could lead the person to either misunderstand or misuse his or her results. Both of those outcomes carry much more risk than simply not knowing one's scores.

Individuals who choose to participate in the group feedback session will gain an understanding of what composite and subscales mean, and what various scores represent. During the group session, the interpreter will stress that EI scores are not a measure of mental health and that scores can be improved with practice. This feedback session will be led by a professional who is certified to administer and interpret the EQi 2.0.

Individual police officers will <u>not</u> know their scores on the Command Feedback Form and will <u>not</u> know whether they fell into the top 20%, middle 60% or bottom 20% in terms of their score on this form.

8. Describe how the procedures reflect respect for privacy, feelings, and dignity of subjects, avoid unwanted invasion of privacy, and minimize risks as much as possible.

Once scores on the Command Feedback Form (which includes the demographic data) and EQi 2.0 are matched for each participant, the principal investigator (PI) will assign all police officers an ID number and names will be removed from the data file. The PI will keep the master list of ID numbers and names in a password-protected computer file. The informed consent form will make clear that the command feedback results are for research purposes only and will not be shared with the police officers or anyone else in GPD. Additionally, no EQi scores will be shared with any supervisors. (NOTE: Officers who are voluntarily pursuing a promotion to corporal have already consented to complete the EQi 2.0 as part of the promotional process. Their scores on the EQi will be shared with the Chief of Police as part of the promotional process and they have been informed of this.)

As stated earlier, participants will also be given a choice about whether to receive their EQi scores or not. If they choose to see their scores, they will be protected from misinformation or a misinterpretation about what the scores mean by participating in a group interpretation of the EQi. During the voluntary group interpretation sessions, care will be taken to explain that low scores can have value, especially when balancing a very high score (e.g., someone with a very high self regard probably will be more effective with medium to lower assertiveness skills). The EQi technical manual and training materials also contain information for "positive wording for low scores" (e.g., someone who is low in assertiveness may enjoy listening to others' opinions) and care will be taken to use such phrasing.

All research data will remain in the home office of the principal investigator in a password protected computer file. The master list of names connected with ID numbers will be destroyed as soon as the study is completed.

Finally, participants will be informed that only group results showing the relationship between EQi scores and performance will be shared with the Greenville Police Department. This information will be shared so that the police department can predict who may or may not be successful in a law enforcement career.

9. Describe the means through which persons will be informed of their right to participate, not to participate, or withdraw at any time. Where students are used as participants, indicate alternatives available to the student in lieu of participation (A copy of the Informed Consent Form must be included. Signed consent forms obtained by researchers should be sent to the office of Provost for safekeeping).

   The consent to participate will be included in the email text that includes the link to the EQi instrument. The email will inform participants that after reading the email, if they choose to complete the EQi, they have elected to participate in the study. The informed consent text will also include an email address where they can send a request to withdraw from the study. The informed consent form will include information about other data collected (e.g., demographic and performance data) and the purpose of the study. (See Appendix A for the informed consent form).

10. Describe the procedures to assure confidentiality in the use, storage, and disposal of primary data.

    As soon as demographic and performance data is matched with EQi data, then all participants will be identified by a research ID number only. Information which contains both a person's name and ID number will be stored in a password protected computer file in the principal investigator's home office and destroyed once the study is completed. EQi data will also be stored in a password protected file and no printed copies of the report will exist except those given to individuals who choose to attend a group interpretation session.

PEACE COLLEGE HUMAN SUBJECTS SUBCOMMITTEE (CHS)

The Human Subjects Sub-Committee approves the following project.

Committee Chair Carol Hussie	Date 15 December 2011
Member Joe Wolf	Date 12-16-11
Member	Date
Member	Date
Member	Date