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The Relationship Between Education and Police Stress : Associate Degree Versus Bachelor Degree

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THE RELATIONSHIP BETWEEN EDUCATION AND POLICE STRESS: ASSOCIATE DEGREE VERSUS BACHELOR DEGREE

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ABSTRACT

"THE RELATIONSHIP BETWEEN EDUACATION AND POLICE STRESS: ASSOCIATE DEGREE VERSUS BACHELOR DEGREE"

Research was conducted to further investigate whether police officers with Bachelor degrees experience less stress than officers with Associate degrees. Sixty police officers from the Charleston Police Department were the respondents in the study. The officers were measured regarding levels of stress experienced from inter-departmental issues, rule, and regulations. The respondents were also evaluated using the Fear of Negative Evaluation Scale, Job Satisfaction Index, and Stress Quiz.

While there were no significant differences between the two groups, police officers with Bachelor degrees reported less stress than officers with Associate degrees.

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To Elliott and all of my friends who have been there for me throughout my graduate studies- you mean more to me than I could ever tell you. I love you all.

This thesis could not have been possible without the love and support of my parents, Jim and Frances. I love you very much. Thank you for everything.

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CHAPTER I

Introduction

The research presented was conducted as a follow-up to a Master's Thesis by Mr. Robert Newell. His study consisted of twenty-nine officers from four police departments located in rural areas. He evaluated the officers' levels of stress experienced from inter-departmental issues, rule, and regulations. Mr. Newell took these findings and compared them to the level of education obtained by each officer. Mr. Newell defined education as 1) those who had attended college, and 2) those who had not attended college. Further comparisons were made using the Fear of Negative Evaluation Scale, Job Satisfaction Index, and the Stress Quiz. Contrary to previous research, Mr. Newell concluded that there were no significant differences among the high school educated group and the college educated group in his study. This study was undertaken to further understand if the unexpected results obtained by Mr. Newell were accurate. Although this study is a follow-up to Mr. Newell's, limitations cited in his study were addressed. The sample used by Mr. Newell could have been a limitation of his study. This study used a larger sample in a more urban area. Also, Mr. Newell's definition of education needed to be stated more clearly. This study defined education into three distinct levels. The three levels of education used in this study are High School (including GED), Associate degree, and Bachelor's degree (including Master's degree). By better defining education, this study corrected the major limitations of Mr. Newell's previous study, and hoped to determine a clear relationship between completion of college training and successfully coping with stress.

CHAPTER II

Review of Literature

A clear distinction needs to be made regarding the differences between stress and pressure. Stress is defined by Webster's Dictionary as "force; pressure; strain; emphasis; weight or importance; accent." Pressure is defined as " a force that compels". Stress is an internal reaction to outside pressure. Education may impact one's ability to handle pressure. This study will look at how police officers of different levels of educational background react to the pressures of their job (stress).

Law enforcement is now considered to be one of the most stressful occupations and is associated with high rates of divorce, alcoholism, suicide, and other emotional and health problems (Finn, 1997). Following the terrorist attacks of September 11, 2001, our nation has been witness to numerous stressful situations and has seen on television the effects it can have on public service employees, including police officers and fire fighters. Changing times have placed police officers under more stress than ever before. According to Kurceczka, "stress affects the officer, other employees, the department, the public, and the officer's family. It can lead to faulty decision-making, disciplinary problems, excessive use of sick leave, tardiness, on-the-job accidents, complaints from citizens, and high officer turnover. All of these behaviors cost the police department time

and money" (1996). This study will look at whether police officers with higher education experience less stress than those with lower levels of education.

A 1973 study of the New York Police Department found officers without a college education were at three times greater risk of being the subject of complaints from civilians than officers with a college education. It was also found that officers without a college education were absent more often than their educated peers. Legal and social issues were also found to be better understood by college educated officers (Lynch, 1987).

Those who enter law enforcement do so for a number of different reasons. Some of the top reasons are helping people, job security, variety of work, decision-making, and the challenge of the job itself. As noted in Stress Management for Law Enforcement Officers, "No matter how hardy or tough people think they are when they join a law enforcement agency, the pain and suffering they are exposed to, the administrative hassles they have to put up with, and the hostility of some of the people they are trying to protect will eventually have negative mental and physical effects" unless precautions are taken (Anderson, 1995).

It has been found that as much as 70 to 90 percent of all illnesses have stress as the root cause (Stratton, 1984). Stress can cause illness and will affect the performance of a police officer. There are three stages of stress that occur in the human body. They are alarm reaction, resistance, and exhaustion. The alarm reaction stage is the "fight-or-flight" state where there is an increase in heart rate, blood pressure, and muscle tone. Adrenaline is secreted during this stage that heightens awareness, which is crucial for police officers in life-or-death situations. The resistance stage comes after a long

exposure to a stressful situation. During this stage, the body has more control and a greater ability to withstand the effects of stress while maintaining performance levels. If the resistance stage continues, exhaustion will overtake the advantages of the coping mechanisms. Physiological and psychological problems can develop. The "fight-or-flight" mechanism once again begins and the heart becomes overworked, blood-cholesterol levels increase, and tissue damage will occur. This series of mechanism can cause heart disease, gastric disorders, arthritis, allergies, and kidney disease (Stratton, 1984).

There are two categories of stress related to police work that have been identified by a 1999 study conducted by Kop, Euwema, and Schaufeli. They are occupational and organizational. The occupational stressors would include duties such as what the public perceives as the nature of police work. These would include physical threat, dealing with traumatized victims of crime, severely injured persons, witnessing death of fellow police officer or person, exposure to danger, and the unknown. Organizational stressors that ranked the highest in their study were staff shortages, dealing with budget constraints, inadequate resources, time pressure, lack of communication, and work overload. It was concluded from their study that the highest stress levels were related to organizational factors. This conclusion was also found by Peter M. Hart in a paper he authored in 1995. He noted that "dealing with road trauma, violent offenders or distressed victims might appear stressful to the general community, but police officers may view these tasks as little more than routine aspects of a job they have chosen to do."

A study of 500 senior police officers in the United Kingdom was conducted in 1992. The researchers distributed an Occupational Stress Indicator (OSI). Results

indicated that the highest job stress related to structure and climate, co-worker relationships and their managerial role. Nine out of ten officers specified that they dealt with stress by planning ahead, dealing with problems immediately, setting priorities, having stable relationships, and trying to deal with situations objectively (Brown, 1996).

Historically, the American Bar Association (1975) noted that there was great disagreement over the "nature and extent" of the training police require. Over twenty-five years later, there is still a lack of agreement in the literature over whether more highly educated police officers are more effective. One group holds the opinion that "college-educated officers are more effective problem solvers and possess a better understanding of people and their problems and, therefore, increase the quality of police services to the community". The opponents of college-educated police officers take the stand that a college education "has little effect on police officers" and sometimes "causes problems for police officers and police departments" (Gaines, 1994). No matter which side of the debate, the reality is that the number of departments which require more than a high school diploma is on the rise and it is expected to continue to increase (Gaines, 1994).

Police officers in other countries go through rigorous training. In Denmark, police officers spend five years in a combination of work experience and class preparation before being considered fully trained. The six regional training centers in England are enormously well staffed and equipped. These centers are a testament to their country's commitment to the importance of training. The American Bar Association says "there is need in this country for similar commitment to the importance of training, to be reflected in the form of vastly increased monetary support for facilities, staff, and

equipment and especially for the time spent by police officers in attendance at training programs".

Vern Folley from the University of Texas has written on some of the resistances to police education (1980). He claims that a large obstacle in educating police officers is a lack of understanding between the police chief and the college administrator. Lack of understanding, misconceptions, and suspicions exist. The police must realize that the college is providing a service to educate the police officers with no other interests beyond their education. The college administrators must work with police departments to help establish programs that meet the practical needs of law enforcement.

According to Gaines (1994) there are three reasons why some departments choose not to require a college education to be on the force. These reasons include: 1) there is a perceived shortage of college-educated applicants, 2) minorities might be discriminated against, and 3) police departments might miss good applicants because they are not college educated. Larry Gaines claims that the first two reasons can be overcome by aggressive recruiting by the department. He also states that "the likelihood that the overall quality of personnel will substantially increase as a result of requiring college credit should sufficiently overcome any reservations associated with missing any otherwise well-qualified person".

It is naturally assumed by our culture that a higher level of education will mean that one will be more successful in the job chosen. This assumption includes working in the police department. Will education help the officer learn how to be a more efficient problem-solver and teach him how to deal more effectively in stressful situations? This study was designed to answer that question.

CHAPTER III

Methods

Hypothesis

It is hypothesized that there will be a statistical significant difference between the amount of stress the groups of police officer experience and the level of education that has been completed. This paper compares those individuals who have completed a 2-year degree (Associate degree) to those individuals who have completed a 4-year degree or above (Bachelor's degree).

Subjects

The Charleston Police Department was used in this study. One hundred and sixty-five packets were distributed throughout the week at morning reports by Chief Jerry Riffe. Each officer received a packet containing a cover letter, four questionnaires, and a self-addressed stamped envelope. The officers were all advised that this study was for the Marshall University Graduate College and that it was completely anonymous. The officers were also informed that the information was going to be used to study stress. Education was not mentioned to the officers.

Instrumentation

To obtain background information, the first questionnaire the officers were given asked the officers to cite their years of experience. The levels of education were listed and they were to check the highest level that they had completed. The levels to choose from were: HS (including GED), Associate degree, Bachelors degree, and Masters degree (or higher).

The following section asked if the officers had been involved in a critical incident in the past two years. This section looked at some of the stressors. The critical incidents included in this section were high speed chase with death or serious injury, exposure to the death of a child, exposure to multiple deaths, attacked with serious injury to self, fellow officer killed on duty, suicide by fellow officer, and use of deadly force. The final scale on this page asked the officer to rank levels of stress from one to five with five being the highest. The officers were to rank inadequate salary, ineffectiveness of correctional system, ineffectiveness of judicial system, court leniency with criminals, lack of participation in policy making, inadequate support by the department, court decisions restricting police, political pressure from within the department, poor or inadequate supervisors, poor or inadequate equipment, excessive paperwork, and insufficient manpower.

Attempts to find the reliability and validity of the instruments used were unsuccessful.

Fear of Negative Evaluation Scale

The Fear of Negative Evaluation Scale is a true/false answer scale of thirty questions. This scale is a self reference scale that measures how a person anticipates the problem situation and the anxiety they experience as a result of how others will evaluate them. One point is given for every answer that matches the answer key with a low score being within the 0-12 range, an average score being within the 13-20 range, and a high score being 21-30.

Stress Quiz

The Stress Quiz asks 28 questions about the police officers' personal experiences and feelings over the past twelve months. An answer of yes or no is given with a value given to the answer of yes. The values range from three points to seven points on the scoring key. Low scores range from zero to 15, medium scores from 16 to 40, and high scores from 41 to 117.

Job Satisfaction Index

The Job Satisfaction Index gives an overview of how police officers' attitudes about their career may have a direct effect on how they perceive stress within their organization. This index contains thirty multiple-choice questions with a scoring key that gives a value of 1, 3, or 5 to various responses. Low scores range from 28 to 80, average scores from 81 to 150, and high scores from 151 and above.

CHAPTER IV

Results

Since there were equal variances in the study, an individual T-test with Levene's Test of Equality of Variances was conducted to get valid results. This test used an alpha level of .05. All variances across comparisons were equal. There were no statistically significant differences between any of the comparisons.

The mean scores for the Organizational Stress Survey show that those with Bachelor's degrees reported slightly lower levels of stress than those with Associate degrees on a majority of the survey questions. Lower mean scores for Bachelor degreed respondents were found on ineffectiveness of correctional system, ineffectiveness of judicial system, court leniency with criminals, lack of participation on policy making, inadequate support by the department, court decisions restricting police, political pressure from within department, and excessive paperwork. Officers with Associate degrees reported lower mean scores on inadequate salary, poor or inadequate supervisors, poor or inadequate equipment, and insufficient manpower. Overall, police officers with Bachelor degrees had a mean of 39.33 on the Organizational Stress Survey while those with Associate degrees reported a mean score of 40.85. Although slight, Bachelor degreed respondents reported less organizational stressors than respondents with Associate degrees. However, the difference was not significant. The Fear of Negative Evaluation Scale, Job Satisfaction Index, and Stress Quiz also showed

slightly lower scores for police officers with Bachelor degrees. These findings also were not significant.

The police officers' scores were also examined on the basis of whether or not they had been exposed to a critical incident in the last two years. Eight officers who held Associate degrees reported being exposed to a critical incident while eighteen officers with Bachelor degrees responded positively. The question was whether or not education may have impacted how these officers responded to stress after the critical incident occurred.

The data concluded that while there were no significant findings between the two groups, officers with a Bachelor degree reported slightly lower levels of stress than officers with an Associate degree.

CHAPTER V

Summary, Limitations, and Conclusion

The data showed no statistical significant correlation between stress and the level of education obtained by the police officers. Although the data supports the theory that police officers with bachelor's degree experience less stress than those with associate degrees, it is not statistically significant. This result did not support the hypothesis originally stated.

The limitations of Mr. Newell's study were addressed in this study. The sample size was increased, a more urban area was used, and "education" was better defined. The results of this study corroborate with Mr. Newell's previous results.

Stress management training appears to be the missing link in both studies. Stress management training teaches how to cope with pressure. Perhaps, the data may not be significant because stress management training specifically rather than the level of education should have been the independent variable. A follow-up study might want to look not only at levels of education, but what types of stress management training the police officers are exposed to through their college coursework.

Another limitation of this study was that it only used police officers for respondents. Given the events of September 11, 2001, fire fighters could be added to the respondent pool.

Other limitations of this study were that all police officers were given the same tests of measure. The line officers were not separated from the administrators although their stressors would probably be different. Also, in a repetition of this study, alternate or additional testing measures or instruments may be considered.

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Appendix

Associate Degree v. Bachelor Degree - Fear of Negative Evaluation Scale
T-Test

Group Statistics

	ED	N	Mean	Std. Deviation	Std. Error Mean
FNES	associate	13	11.08	6.89	1.91
	Bachelor	23	7.26	6.05	1.26

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
FNES	Equal variances assumed	.411	.526	1.729	34	.093	3.82	2.21
	Equal variances not assumed			1.667	22.442	.109	3.82	2.29

Associate Degree v. Bachelor Degree - Job Satisfaction Index
T-Test

Group Statistics

	ED	N	Mean	Std. Deviation	Std. Error Mean
JSI1	associate	13	3.46	.88	.24
	Bachelor	24	3.42	.83	.17
JSI2	associate	12	3.17	1.34	.39
	Bachelor	23	3.35	1.30	.27
JSI3	associate	13	3.77	1.74	.48
	Bachelor	24	4.33	1.27	.26
JSI4	associate	13	4.08	1.75	.49
	Bachelor	24	3.83	1.66	.34
JSI5	associate	13	3.46	2.03	.56
	Bachelor	22	3.27	1.88	.40
JSI6	associate	13	3.31	1.11	.31
	Bachelor	24	3.58	.93	.19
JSI7	associate	13	4.23	1.30	.36
	Bachelor	24	4.25	1.29	.26
JSI8	associate	13	3.77	1.54	.43
	Bachelor	24	3.17	1.66	.34
JSI9	associate	13	5.00	.00	.00
	Bachelor	24	4.92	.41	8.33E-02
JSI10	associate	13	4.38	1.50	.42
	Bachelor	24	4.50	1.35	.28
JSI11	associate	13	4.69	.75	.21
	Bachelor	24	5.08	2.32	.47
JSI12	associate	13	23.08	12.00	3.33
	Bachelor	24	18.04	9.20	1.88
JSI14	associate	13	3.15	.55	.15
	Bachelor	24	3.33	.96	.20
JSI15	associate	13	2.85	.55	.15
	Bachelor	24	3.58	1.10	.22
JSI16	associate	13	5.00	.00	.00
	Bachelor	24	4.83	.56	.12
JSI17	associate	13	3.62	.96	.27
	Bachelor	24	4.42	1.10	.22
JSI18	associate	13	5.00	.00	.00
	Bachelor	23	4.83	.83	.17
JSI19	associate	13	4.08	1.32	.37
	Bachelor	24	3.58	1.50	.31
JSI20	associate	13	4.38	1.26	.35
	Bachelor	24	4.58	.83	.17
JSI21	associate	13	5.00	.00	.00
	Bachelor	24	4.58	1.18	.24
JSI22	associate	13	1.62	.96	.27
	Bachelor	24	1.83	1.01	.21
JSI23	associate	13	2.23	1.54	.43
	Bachelor	24	2.33	1.40	.29
JSI24	associate	13	2.85	1.52	.42
	Bachelor	21	3.67	1.32	.29
JSI25	associate	13	2.69	1.80	.50
	Bachelor	24	1.75	1.29	.26
JSI26	associate	13	3.31	1.80	.50

Associate Degree v. Bachelor Degree - Organizational Stress T-Test

Group Statistics

	ED	N	Mean	Std. Deviation	Std. Error Mean
salary	associate	13	3.92	.76	.21
	Bachelor	23	4.17	.83	.17
prisons	associate	13	3.31	.63	.17
	Bachelor	24	3.29	1.04	.21
judical	associate	13	3.85	.80	.22
	Bachelor	24	3.63	.97	.20
lenient	associate	13	3.92	.64	.18
	Bachelor	24	3.67	.92	.19
policy	associate	13	2.92	.95	.26
	Bachelor	24	2.83	1.05	.21
support	associate	13	3.77	1.17	.32
	Bachelor	24	3.54	1.14	.23
restrict	associate	13	3.62	1.04	.29
	Bachelor	24	3.04	.91	.19
politics	associate	13	3.38	.96	.27
	Bachelor	24	2.96	1.40	.29
bosses	associate	13	2.69	.95	.26
	Bachelor	24	2.88	.99	.20
equipment	associate	13	2.46	.97	.27
	Bachelor	24	2.96	1.04	.21
paperwork	associate	13	3.62	1.04	.29
	Bachelor	24	3.38	1.06	.22
manpower	associate	13	3.62	1.33	.37
	Bachelor	24	3.63	1.10	.22
OSTOT	associate	13	41.0769	7.3537	2.0395
	Bachelor	23	39.9130	7.9368	1.6549

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. E Differe
salary	Equal variances assumed	1.035	.316	-.894	34	.378	-.25	
	Equal variances not assumed			-.918	27.072	.367	-.25	
prisons	Equal variances assumed	2.102	.156	.050	35	.960	1.60E-02	
	Equal variances not assumed			.058	34.440	.954	1.60E-02	
judical	Equal variances assumed	1.633	.210	.702	35	.488	.22	
	Equal variances not assumed			.743	29.069	.463	.22	
lenient	Equal variances assumed	4.949	.033	.894	35	.377	.26	
	Equal variances not assumed			.994	32.519	.328	.26	
policy	Equal variances assumed	.566	.457	.256	35	.799	8.97E-02	
	Equal variances not assumed			.264	26.864	.794	8.97E-02	
support	Equal variances assumed	.075	.786	.575	35	.569	.23	
	Equal variances not assumed			.571	24.280	.573	.23	
restrict	Equal variances assumed	1.322	.258	1.741	35	.090	.57	
	Equal variances not assumed			1.669	21.927	.109	.57	
politics	Equal variances assumed	2.159	.151	.978	35	.335	.43	
	Equal variances not assumed			1.092	32.801	.283	.43	
bosses	Equal variances assumed	.006	.938	-.543	35	.590	-.18	
	Equal variances not assumed			-.551	25.745	.587	-.18	
equipment	Equal variances assumed	.000	.990	-1.419	35	.165	-.50	
	Equal variances not assumed			-1.451	26.378	.159	-.50	
paperwork	Equal variances assumed	.003	.958	.664	35	.511	.24	
	Equal variances not assumed			.666	24.975	.511	.24	
manpower	Equal variances assumed	.554	.462	-.024	35	.981	-9.62E-03	
	Equal variances not assumed			-.022	21.031	.982	-9.62E-03	
OSTOT	Equal variances	.033	.858	.434	34	.667	1.1639	2

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
ED	1	high school	22
	2	associate	13
	3	Bachelor	23

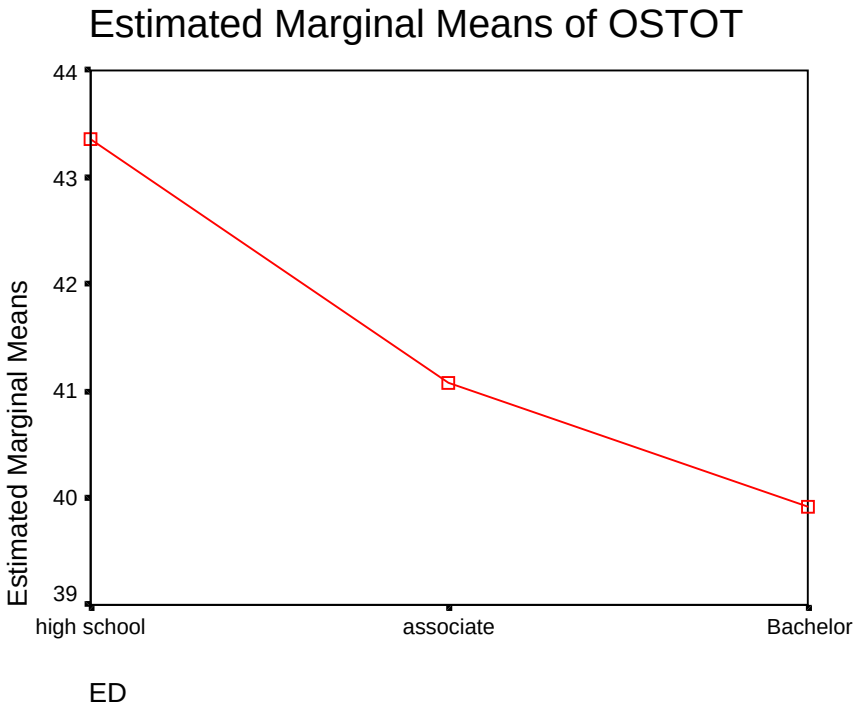
Tests of Between-Subjects Effects

Dependent Variable: OSTOT

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	136.643[a]	2	68.321	1.206	.307
Intercept	93236.479	1	93236.479	1645.786	.000
ED	136.643	2	68.321	1.206	.307
Error	3115.840	55	56.652		
Total	103060.000	58			
Corrected Total	3252.483	57			

a. R Squared = .042 (Adjusted R Squared = .007)

Profile Plots



Associate Degree v. Bachelor Degree- Stress Quiz
T-Test

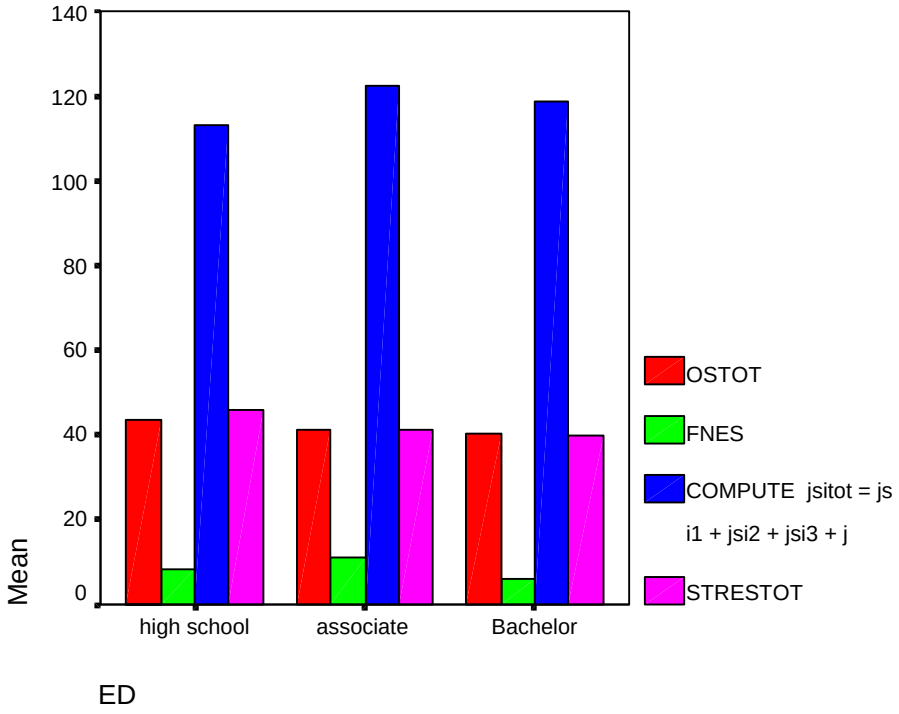
Group Statistics

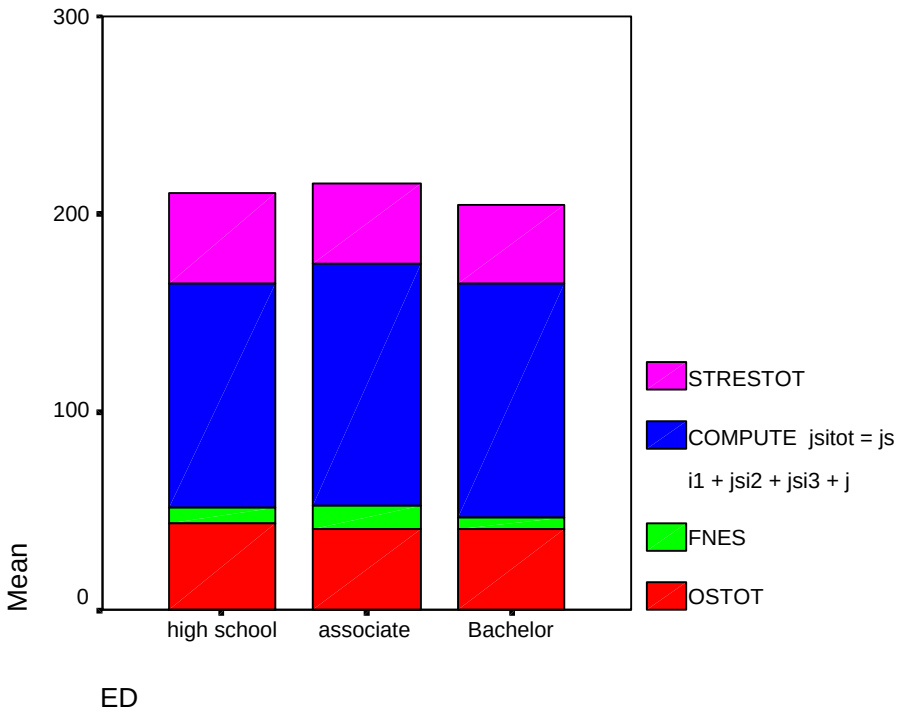
	ED	N	Mean	Std. Deviation	Std. Error Mean
STRESS1	associate	13	2.08	1.44	.40
	Bachelor	23	1.96	1.46	.30
STRESS2	associate	13	1.85	1.52	.42
	Bachelor	23	1.57	1.53	.32
STRESS3	associate	13	.46	1.13	.31
	Bachelor	23	.78	1.35	.28
STRESS4	associate	13	1.38	1.56	.43
	Bachelor	23	1.83	1.50	.31
STRESS5	associate	13	1.85	1.52	.42
	Bachelor	23	.91	1.41	.29
STRESS6	associate	13	2.08	1.44	.40
	Bachelor	23	1.57	1.53	.32
STRESS7	associate	13	1.38	1.56	.43
	Bachelor	23	1.04	1.46	.30
STRESS8	associate	13	1.15	1.52	.42
	Bachelor	23	1.30	1.52	.32
STRESS9	associate	13	1.15	1.52	.42
	Bachelor	23	1.17	1.50	.31
STRESS10	associate	13	1.46	1.94	.54
	Bachelor	23	1.39	1.95	.41
STRESS11	associate	13	1.54	2.03	.56
	Bachelor	23	2.26	2.03	.42
STRESS12	associate	13	1.23	1.92	.53
	Bachelor	23	1.91	2.04	.43
STRESS13	associate	13	1.23	1.92	.53
	Bachelor	23	1.57	2.00	.42
STRESS14	associate	13	.62	1.50	.42
	Bachelor	23	.35	1.15	.24
STRESS15	associate	13	.62	1.50	.42
	Bachelor	23	1.22	1.88	.39
STRESS16	associate	13	2.15	2.08	.58
	Bachelor	23	2.26	2.03	.42
STRESS17	associate	13	1.54	2.03	.56
	Bachelor	23	1.91	2.04	.43
STRESS18	associate	13	.92	1.75	.49
	Bachelor	23	.35	1.15	.24
STRESS19	associate	13	2.46	2.03	.56
	Bachelor	23	1.74	2.03	.42
STRESS20	associate	13	1.85	2.08	.58
	Bachelor	23	1.22	1.88	.39
STRESS21	associate	13	1.85	2.08	.58
	Bachelor	23	1.57	2.00	.42
STRESS22	associate	13	.92	1.75	.49
	Bachelor	23	.91	1.78	.37
STRESS23	associate	13	1.54	2.40	.67
	Bachelor	23	1.30	2.24	.47
STRESS24	associate	13	.77	1.88	.52
	Bachelor	23	1.09	2.11	.44
STRESS25	associate	13	1.54	2.40	.67

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
STRESS1	Equal variances assumed	.242	.626	.239	34	.813	.12	.50	-.90	1.15
	Equal variances not assumed			.240	25.328	.813	.12	.50	-.91	1.15
STRESS2	Equal variances assumed	1.066	.309	.530	34	.600	.28	.53	-.80	1.36
	Equal variances not assumed			.531	25.220	.600	.28	.53	-.81	1.37
STRESS3	Equal variances assumed	2.428	.128	-.727	34	.472	-.32	.44	-1.22	.58
	Equal variances not assumed			-.764	28.925	.451	-.32	.42	-1.18	.54
STRESS4	Equal variances assumed	.434	.514	-.838	34	.408	-.44	.53	-1.51	.63
	Equal variances not assumed			-.829	24.216	.415	-.44	.53	-1.54	.66
STRESS5	Equal variances assumed	.774	.385	1.854	34	.072	.93	.50	-8.96E-02	1.96
	Equal variances not assumed			1.816	23.514	.082	.93	.51	-.13	1.99
STRESS6	Equal variances assumed	3.581	.067	.983	34	.333	.51	.52	-.55	1.57
	Equal variances not assumed			1.000	26.363	.326	.51	.51	-.54	1.56
STRESS7	Equal variances assumed	1.057	.311	.657	34	.515	.34	.52	-.71	1.40
	Equal variances not assumed			.646	23.717	.525	.34	.53	-.75	1.43
STRESS8	Equal variances assumed	.357	.554	-.285	34	.777	-.15	.53	-1.22	.92
	Equal variances not assumed			-.285	25.057	.778	-.15	.53	-1.24	.94
STRESS9	Equal variances assumed	.006	.939	-.038	34	.970	-2.01E-02	.52	-1.08	1.04
	Equal variances not assumed			-.038	24.726	.970	-2.01E-02	.52	-1.10	1.06
STRESS10	Equal variances assumed	.007	.936	.104	34	.918	7.02E-02	.68	-1.30	1.44
	Equal variances not assumed			.104	25.107	.918	7.02E-02	.67	-1.32	1.46
STRESS11	Equal variances assumed	.357	.554	-1.027	34	.312	-.72	.70	-2.15	.71
	Equal variances not assumed			-1.028	25.057	.314	-.72	.70	-2.17	.73
STRESS12	Equal variances assumed	3.581	.067	-.983	34	.333	-.68	.69	-2.09	.73
	Equal variances not assumed			-1.000	26.363	.326	-.68	.68	-2.08	.72
STRESS13	Equal variances assumed	1.070	.308	-.489	34	.628	-.33	.68	-1.72	1.05
	Equal variances not assumed			-.495	25.855	.625	-.33	.68	-1.72	1.06
STRESS14	Equal variances assumed	1.416	.242	.599	34	.553	.27	.45	-.64	1.17
	Equal variances not assumed			.556	20.099	.584	.27	.48	-.74	1.27
STRESS15	Equal variances assumed	4.825	.035	-.987	34	.330	-.60	.61	-1.84	.64
	Equal variances not assumed			-1.052	29.900	.301	-.60	.57	-1.77	.57
STRESS16	Equal variances									

Means


140
120
100
80
60
40
20
0
Mean
high school
associate
Bachelor
ED
OSTOT
FNES
COMPUTE jsitot = js
i1 + jsi2 + jsi3 + j
STRESTOT


300
200
100
0
Mean
high school
associate
Bachelor
ED
STRESTOT
COMPUTE jsitot = js
i1 + jsi2 + jsi3 + j
FNES
OSTOT

ORGANIZATIONAL STRESS RESULTS FOR ASSOCIATE AND BACHELOR DEGREES

Sub	Ed	Years	1	2	3	4	5	6	7	8	9	10	11	12	Total	Rate
24	AS	16	4	3	3	3	2	3	3	2	2	2	3	2	32	2.67
25	AS	14	5	3	3	4	2	3	2	4	3	2	4	3	38	3.17
26	AS	1	4	4	4	4	2	5	3	3	1	3	5	5	43	3.58
27	AS	18	3	3	4	4	2	3	4	2	3	3	3	4	38	3.17
28	AS	5.5	5	3	3	4	3	5	5	5	3	2	3	5	46	3.83
29	AS	1	3	3	3	3	2	1	2	3	1	1	2	2	26	2.17
30	AS	8	4	4	4	4	3	5	3	3	3	3	4	4	41	3.42
31	AS	3	3	4	4	4	3	4	4	3	3	3	4	4	43	3.58
32	AS	3	3	3	3	4	3	4	3	3	2	2	3	3	36	3.00
33	AS	22.5	4	2	5	3	4	4	4	4	3	2	2	1	38	3.17
34	AS	25	4	4	5	5	4	3	5	5	4	4	5	4	52	4.33
35	AS	19	5	4	4	4	3	4	4	4	4	4	4	5	49	4.08
36	AS	8	4	3	5	5	5	5	5	3	3	1	5	5	49	4.08
37	B	6	5	5	5	4	5	5	3	5	3	2	5	2	49	4.08
38	B	22.5	3	4	5	5	3	3	4	3	4	3	4	4	45	3.75

39	**B**	**26.5**	**5**	**3**	**5**	**5**	**4**	**5**	**3**	**3**	**2**	**2**	**3**	**3**	**43**	**3.58**
40	**B**	**9**	**5**	**3**	**4**	**4**	**3**	**5**	**4**	**5**	**3**	**3**	**5**	**3**	**47**	**3.92**
41	**B**	**10**		**3**	**3**	**3**	**3**	**3**	**4**	**4**	**3**	**3**	**4**	**4**	**34**	**2.83**
42	**B**	**7**	**3**	**3**	**4**	**4**	**2**	**3**	**3**	**5**	**3**	**4**	**3**	**4**	**41**	**3.42**
43	**B**	**18**	**5**	**3**	**3**	**4**	**2**	**5**	**3**	**4**	**2**	**3**	**4**	**5**	**43**	**3.58**
44	**B**	**26**	**4**	**3**	**3**	**4**	**4**	**4**	**2**	**3**	**3**	**3**	**3**	**4**	**40**	**3.33**
45	**B**	**4.5**		**1**	**3**	**3**	**1**	**1**	**1**	**1**	**3**	**1**	**2**	**2**	**22**	**1.83**
46	**B**	**18**	**5**	**4**	**4**	**4**	**3**	**4**	**3**	**5**	**4**	**4**	**3**	**5**	**48**	**4.00**
47	**B**	**6**	**5**	**5**	**5**	**5**	**4**	**4**	**5**	**3**	**3**	**5**	**5**	**5**	**54**	**4.50**
48	**B**	**7**	**5**	**5**	**5**	**4**	**2**	**3**	**4**	**2**	**1**	**3**	**3**	**4**	**41**	**3.42**
49	**B**	**7**	**5**	**4**	**4**	**5**	**3**	**2**	**4**	**1**	**3**	**4**	**2**	**3**	**40**	**3.33**
50	**B**	**28**	**4**	**2**	**3**	**3**	**2**	**3**	**2**	**1**	**4**	**2**	**2**	**2**	**30**	**2.50**
51	**B**	**13**	**4**	**4**	**2**	**3**	**2**	**2**	**3**	**1**	**2**	**2**	**3**	**4**	**32**	**2.67**
52	**B**	**7**	**3**	**3**	**3**	**2**	**1**	**2**	**3**	**3**	**3**	**3**	**3**	**2**	**27**	**2.25**
53	**B**	**6**	**5**	**5**	**5**	**5**	**4**	**4**	**3**	**1**	**5**	**4**	**2**	**4**	**47**	**3.92**
54	**B**	**5.5**	**3**	**3**	**3**	**3**	**2**	**3**	**3**	**2**	**3**	**2**	**3**	**2**	**29**	**2.42**
55	**B**	**4**	**4**	**3**	**2**	**2**	**2**	**3**	**2**	**2**	**1**	**3**	**2**	**5**	**31**	**2.58**
56	**B**	**12**	**4**	**2**	**4**	**4**	**2**	**4**	**3**	**4**	**2**	**2**	**5**	**3**	**39**	**3.25**

57	**B**	**24**	**4**	**3**	**3**	**3**	**4**	**5**	**3**	**4**	**4**	**5**	**5**	**5**	**48**	**4.00**
58	**B**	**2**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**2**	**2**	**4**	**3**	**35**	**2.92**
59	**B**	**22**	**4**	**2**	**3**	**3**	**4**	**3**	**2**	**4**	**4**	**4**	**3**	**5**	**41**	**3.42**
60	**B**	**7**	**5**	**3**	**3**	**3**	**3**	**4**	**4**	**3**	**3**	**3**	**3**	**4**	**38**	**3.17**