

Religion and Stress in Daily Life

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It is debated among researchers whether there is an existing relationship between religion and well-being. Some researchers have found that religion diminishes stress. However, some claim that this can be influenced by age, as older people have been found to be more religious than younger people. Therefore, age, gender, ethnicity, and education are controlled for by using multivariate regression techniques. Religiosity is predicted to diminish stress in daily life. In a sample of 101 surveys, result of the regression analysis showed significant support for the hypothesis that the more faithful people are the less stress they have; age, gender, ethnicity, and education showed to have no statistically significant effect on stress.

I. INTRODUCTION

¹Currently, people in the United States have many goals and responsibilities. Many of which include education, careers, marriage, and child rearing. Nowadays, it is required that both parents work in order to keep up with costs of living and raising a family. Additionally, the burden must be twice as hard on single parents. As a result, people are more likely to feel stressed in their daily lives. "Stress is simply a fact of nature, forces from the outside world that are affecting the individual. The

individual responds to stress in ways that affect the individual as well as their environment" (Panzarino 1998). Individuals that experience stressful lifestyles not only influence their own lives, but those around them.

It is debated among researchers whether there is an existing relationship between religion and well-being. Many argue that religion is positively related to healthy well-being. It has been found, for instance, that people who are more religiously involved tend to live longer than those who were not involved. In addition, religion allows people to have a social support network which alleviates anxiety and depression. On the other hand, other researchers have found that religion has no effect or that it can even aggravate stress. Some explanations for differences in findings may be

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due to individual styles of adaptation among people of different ages as older people tend to be more religious than younger ones (Noor 2008). This study examines whether religious beliefs play a significant role in relieving stress.

II. RESEARCH HYPOTHESIS

Key Research Hypothesis: Religious Beliefs

Individuals that participate in religious activities may resort to them because it might help them cope or deal with stress. Once people depend on the Lord or something religious in their mind, they may tend to count on it and become less stressed. Christians get strength from pray like Buddhists get comfort from worshipping in the temple. Therefore, I hypothesize that religious beliefs will have a negative effect on stress level.

Other research hypotheses:

“**Age**” would have a negative effect on stress. In many cases, young people have experienced plenty of worries and stress when they are either teenagers or have just begun their career. Middle-aged persons have already gotten used to hardship in daily life, so they may not be as stressed as younger people. Most seniors are in retirement and enjoy their sunset golden times without as many worries as they had before. Based on this, I hypothesize that young people tend to get stressed more easily than older people.

“**Gender**” may be a contributing factor to people’s stress levels. Society imposes heavy expectations upon females which raise their stress level;

whereas, males in the same situation can be easily excused from the same expectation. Males are expected to have a good career in their life; while females are anticipated to do both, a professional career and care for the family. Therefore, I hypothesize that women deal with greater levels of stress than males.

“**Ethnicity**” would also play a role in the level of stress. The United States is a diverse country with immigrants from all over the world. Minorities as newcomers to an unfamiliar land are required to devote more time to achieve the “American dream.” Therefore, minorities would be expected to endure greater stress levels than the majority population, as they are faced with more difficult situations. For example, language challenges, cultural assimilation and social-economic status. I hypothesize that Hispanic, Asian, and other races which include Native Americans, Black/African Americans, etc. would have more stress than Whites in the United States.

“**Education**” may have a negative effect on stress level. People with higher education might know of more techniques to relieve their stress such as meditation. Comparatively speaking, people with low education may know of fewer solutions to their worries and problems so they are hypothesized to have higher stress score than the persons with high education.

III. THE DATA AND VARIABLES

A total of 101 surveys were distributed and all were completed and returned. The surveys were distributed at hospitals, factories, schools, public libraries, metro stations, and churches

around the Los Angeles region using an availability sampling method. The survey distribution and data entry were conducted during November 2008 through January 2009. The questionnaire consisted of two parts. The first part was a demographics section, including gender, age, ethnicity, and education level. Additionally, respondents needed to rate their level of religious faith, using a 5-point scale (1= not at all, 2=very little, 3 = somewhat, 4=much, 5 = very much). In the second part respondents were asked to answer 11 questions which were selected from an online stress test.

Stress: The Dependent Variable

The “Stress” component, which is represented as the dependent variable represents the stress capacity. To measure this variable, respondents are asked to indicate their stress level using a 9-point Lickert scale, ranging from “1” which equals not at all and ending at “9” which equals very much, for the following statements:

- (1) I find myself eating emotionally: eating unhealthy foods or eating when I am not hungry, as a response to stress or difficult feelings.
- (2) I don't ever have trouble sleeping.
- (3) I am experiencing any digestive problems, such as indigestion, irritable bowel syndrome, or ulcers.
- (4) I am suffering from burnout, or anxiety.
- (5) I am not getting regular exercise.

- (6) I find myself smoking and/or drinking to excess as a way to deal with stress.
- (7) I don't often find myself with tension headaches.
- (8) I am having trouble maintaining a healthy weight or, I am gaining weight.
- (9) I easily get irritated lately.
- (10) I did not miss work in the last year due to actual illness.
- (11) I have a feeling that stress may be affecting my health.

For each respondent, an index was created out of the 11 questions, to calculate individual stress level.

Religiosity: Key Independent Variable

Religiosity is defined here as the respondents level of religiosity. Respondents are asked to rate their own religious level using 5-point scale with 1 indicating “not at all”, 2 indicating “very little”, 3 indicating “somewhat”, 4 indicating “much”, and 5 indicating “very much”.

Other Control Variables

Respondents were asked to provide their demographic information, including gender, age, and ethnicity, education at the beginning of the survey. Ethnicity includes Hispanic/Latino, Asian/Pacific Islander, Native American, Black/African-American, Caucasian/White, and other. Since White is regarded as reference group, I recoded it as “0”.

Education: The level of education was asked to be identified at varied levels ranging from high school through the doctorate concentration.

The details for the scale can be found in table 1.

IV. FINDINGS

(1) Univariate Analysis

Univariate Distribution of Stress Score and Religious Level

The lower score a person has, the less stressed he/she is. The mean for stress is 41.29 with a standard deviation 15.25. There were only 6 respondents (5.9%) with a stress score of 11-21. There were twenty-three respondents (22.8%) with a score of 22-32, thirty-three (32.7%) with a score 33-43, and twenty (19.8%) with a score 44-54. Nineteen reported stress scores in the range of 55 to 87. None of the respondents have a score higher than 87. Figure 1 shows the distribution of the stress scores.

As for the key independent variable, religious level, there are twelve (11.9%) respondents who claim they are “not at all” religious, eleven (10.9%) claim they are “a little”, thirty-three (32.7%) “somewhat”, twenty-three (22.8%) claim themselves as “much”, and twenty-two (21.8%) claim themselves as “very much faithful” in their religion. Figure 2 shows the distribution of religious level.

Table 1 reports the univariate distribution of the respondents for each of the variables used in the analysis. There were 51 males and 50 females who took part in the survey. Ages ranged from 18 to 68, with a mean age of 32 years old. There were 32 Hispanics (31.7%), 39 Asians (38.6%), and other (17.8%).

About 85% are college students with Bachelor degrees, graduate students,

or hold a Master’s degree. There are fourteen (18.9%) respondents with an education level below college, and there are only 2 (2%) with PHD.

Table 1. Survey Questions and Descriptive Statistics of Variables Used in the Analysis

Variable	Survey Questions Used	Response Categories	Frequency	Mean	S. D.
Gender	• What is your gender?	1 = Male 2 = Female	51 (50.5%) 50 (49.5%)	1.50	0.50
Age	What is the year of your birth?			32.41	11.32
Hispanic	What is your racial background?	1= Hispanic 0= otherwise	32 (31.7%) 69 (68.3%)	0.32	0.47
Asian	What is your racial background?	1= Asian 0= otherwise	39 (38.6%) 62 (61.4%)	0.39	0.49
Other	What is your racial background?	1= Other 0= otherwise	18 (17.8%) 83 (82.2%)	0.18	0.39
Religiosity	Rate your level of religious faith	1= not at all 2= a little 3= somewhat 4= much 5= very much	12 (11.9%) 11 (10.9%) 33 (32.7%) 23 (22.8%) 22 (21.8%)	3.32	1.26
Education	What is your Education level?	1= Some high school 2= High School graduate 3= Some college 4= Current College Student 5= Associate Degree 6= BA/BS 7= Some Grad School 8=Current grad school stud 9= Master's Degree 10= PHD/MD/Post doctorate	5 (5.0%) 9 (8.9%) 11 (10.9%) 29 (28.9%) 11 (10.9%) 16 (15.8%) 1 (1%) 8 (7.9%) 9 (8.9%) 2 (2%)	4.90	2.28
Stress Score	Add up all the 11 variables			41.20	15.25

Figure 1. Distribution of Stress Scores

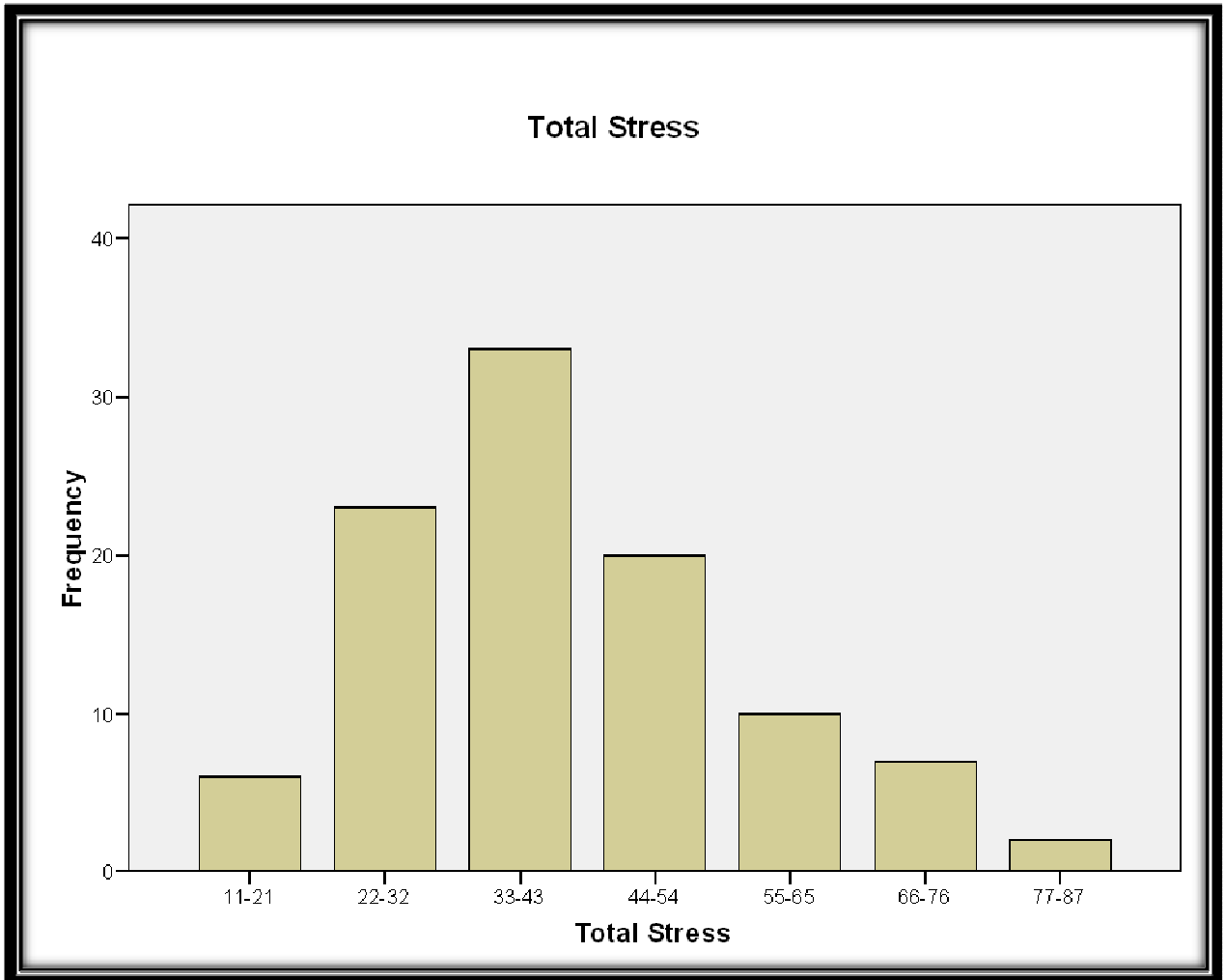
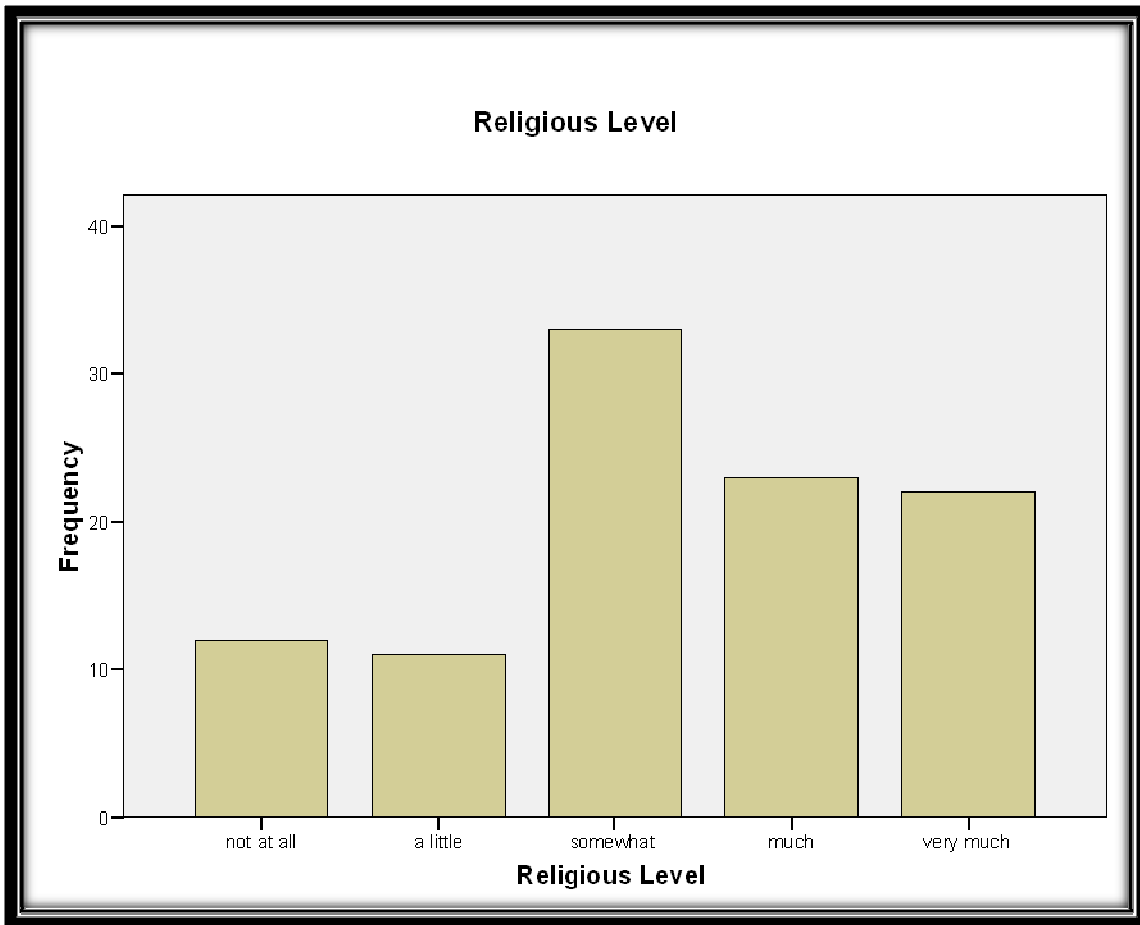


Figure 2. Distribution of Religious Level



(2) PEARSON'S CORRELATION ANALYSIS

Table 2 reports Pearson's correlation coefficients among the variables. As predicted, significant negative correlations were found between *religious level* and *stress score* ($r = -.39$ at the 0.01 level, 2-tailed), and *age* and *stress score* ($r = -.31$ at the 0.01 level, 2-tailed). Similarly there was a negative correlation, though not significant, between *gender* and *stress score* ($r = -.03$), and *education* and *stress score* ($r = -.09$).

The most important finding was the significant negative correlation found between *religious level* and *stress score*. The analyzed coefficients support the hypothesis that *religious level* has a negative relationship with stress levels. Similarly, *age* has significant negative relationship with *stress score*. The analyzed coefficients support the hypothesis that younger people tend to get stressed more easily than older people.

As I expected, *Hispanic* ethnicity and *stress score* have significant positive correlation ($r = .42$ at the 0.01 level), which indicates the Hispanic respondents hold higher stress levels than the non-Hispanic group. On the contrary, the *Asian* ethnicity and *stress score* have negative correlation ($r = -.36$ at the 0.01 level), which is to say, Asian respondents are not as stressed as the non-Asian group. However, *other ethnicities* do not have a significant correlation with *stress score*, indicating that there is no significant difference in the level of stress between Hispanic, Asian, White groups and other ethnic groups such as Native American, Black/African-American, and others.

Table 2. Pearson's Correlation Coefficients of Variables Used in the Analysis

		Total Stress Score	Religious Level	Gender	Age	Education	Hispanic or not	Asian or not	other or not
Total Stress Score	Pearson Correlation		-.389(**)	-.034	-.311(**)	-.085	.419(**)	-.360(**)	.004
	Sig. (2-tailed)		.000	.737	.002	.398	.000	.000	.967
	N		101	101	101	101	101	101	101
Religious Level	Pearson Correlation			.207(*)	.090	.008	-.155	.204(*)	.109
	Sig. (2-tailed)			.038	.370	.940	.123	.040	.278
	N			101	101	101	101	101	101
Gender	Pearson Correlation				-.206(*)	-.079	.049	-.135	.263(**)
	Sig. (2-tailed)				.039	.432	.624	.180	.008
	N				101	101	101	101	101
Age	Pearson Correlation					.314(**)	-.230(*)	.197(*)	-.008
	Sig. (2-tailed)					.001	.020	.048	.940
	N					101	101	101	101
Education	Pearson Correlation						-.158	.079	-.014
	Sig. (2-tailed)						.115	.429	.890
	N						101	101	101
Hispanic or not	Pearson Correlation							-.540(**)	-.317(**)
	Sig. (2-tailed)							.000	.001
	N							101	101
Asian or not	Pearson Correlation								-.369(**)
	Sig. (2-tailed)								.000
	N								101
Other or not	Pearson Correlation								
	Sig. (2-tailed)								
	N								

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

(3) OLS REGRESSION ANALYSIS

The bivariate associations may be spurious because of the effects of other variables that may affect both the dependent and the key independent variables simultaneously. In order to control the effects of other variables on stress scores, the data was analyzed using multivariate regression techniques. Since stress is a continuous variable, OLS regression is used to estimate the effect of the independent variables on stress. As shown in Table 3, the Adjusted R Square shows that the model fits the data well, providing empirical support that the model successfully explains 30.4 % of the variance present in the dependent variable. In addition, the resulting F test is statistically significant at the .01 level. These results indicate that at least one dependent variable has significant effect on the stress score.

Table 3 also shows the relationship of independent variables and dependent variable. The regression coefficients of *gender*, *education*, *Asian*, and *other* are all statistically insignificant at the 0.05 level net of other variables in the model. These findings show that gender, education, whether they are Asian or not, whether they are Native American and Black American or not, all have no significant effects on *stress*.

The most important finding is the regression coefficient of *Religious level* that is negative and statistically

significant at .01 level net of other variables in the model. I hypothesized that *religious level* has a negative relationship with the degree of *stress*. The findings support my notion that the more faithful people are, the less stress they have.

Age's regression coefficient is negative and statistically significant at .05 level net of other variables in the model. I hypothesized that *age* would have a negative effect on stress. My hypothesis was supported in that the stress level will decrease as people get older.

The most interesting significance found in OLS regressions is that the regression coefficient of *Hispanics* is positive and statistically significant at the .01 level net of other variables in the model. With Whites is used as the reference category. I hypothesized that minorities *hold* a positive effect with the degree of *stress*. The findings support part of my hypothesis that the Hispanic respondents are more stressful than their white counterparts. However, the findings do not support that with the Asian respondents. There is no significant difference in the level of stress between Asian and White. In the same way, the findings show there is no significant difference in the stress scores between the white and other ethnic groups such as Native American, Black American and other.

Table 3. OLS Regression of Stress Score on Selected Variables

Independent Variables	Coef.	(s.e.)
Intercept	59.77	(7.33) **
Religious level	-3.82	(1.08) **
Gender	-2.40	(2.77)
Age	-.30	(.12) *
Education	.31	.594
Hispanic or not	13.26	(4.45) **
Asian or not	.835	(4.37)
Other or not	7.82	(5.03)
N	104	
F-test	7.24 **	
Adjusted R-square	0.304	

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

V. CONCLUSION

The primary goal of this study was to investigate how religious beliefs aid people in dealing with stress. Overall, the results support the hypothesis which indicated that high levels of religious beliefs help people effectively cope with stress. It was found that people with a higher religious level reported lower stress scores than respondents with low religious levels.

Age also plays an important role in stress scores. Younger people struggle with stress much more than older people do. As young adults learn to cope with increasing demands and pressures, the teen years often bring about an increase in perceived stress. Other studies have shown that excessive stress during the teen years can have a negative impact upon both physical and mental health later in life. For example, teen stress is a risk factor for the development of depression. Sometimes depression is a serious

condition that carries an increased risk of suicide (Panzarino 1998).

According to a 2006 national survey conducted by the American Psychological Association (APA) and released in partnership with the National Alliance for Hispanic Health and the National Women's Health Resource Center, nearly all Americans experience stress. Unfortunately, stress is especially a major health concern for Hispanics with more than half reporting that they are worried about stress in their daily lives. (Snyder, Cervantes, Padilla 2004).

“Fortunately, effective stress-management strategies can diminish the ill effects of stress. Strong social support networks among school, family, and religious or other group affiliations can help reduce the subjective experience of stress. Recognition of the problem and helping teens to develop stress-management skills can also be valuable preventive measures. In severe cases, a physician or other health care provider can

recommend treatments or counseling that can reduce the long-term risks of teen stress” (Panzarino 1998). The reported evidence may have two limitations. First, the scope of this research was limited to the analyzed variables. As a result, extraneous variables omitted from this analysis could have produced different outcomes. For instance, income was not counted as an independent variable. Second, most (85%) of the respondents had some college level education or higher which means the sample did not contain varied education levels on which to make accurate comparisons. Lastly, the sample was collected based on availability which indicates we cannot generalize these findings to the American population.

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