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STRESS LEVELS AND SOURCES OF OCCUPATIONAL STRESS AMOUNG PSI CHI FACULTY ADVISORS

by

Tristan Quinn Nelson

Thesis submitted in partial fulfillment of the requirements for the degree

of

DEPARTMENTAL HONORS

in

Psychology in the Department of Psychology

Approved:	
Thesis/Project Advisor	Departmental Honors Advisor
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Spring 2009

Abstract

Psi Chi faculty advisors are the guiding force behind each functioning chapter nationwide. Unfortunately faculty members broadly are experiencing ever increasing levels of occupational stress due to teaching, research, and advising responsibilities (Tytherleigh, Webb, Cooper, & Ricketts, 2005). This stress often results in decreased productivity and an increase in absenteeism and disability (Pelletier & Lutz, 1988). As the Psi Chi mission statement is "to continue to encourage, stimulate, and maintain excellence in scholarship of the individual members" (Psi Chi, 2002), it is important that faculty advisors be active, involved, and healthy. The current study sought to assess general stress levels as well as specific sources of stress among a national sample of Psi Chi faculty advisors using the Job Stress Survey (Spielberger, Reheiser, Reheiser, & Vagg, 2000). Tenure track status, professor rank, years working in the field, and scholarly productivity were also assessed and compared with occupational stress levels. Our objective was to discover how much and what type of stress Psi Chi advisors experienced. We also attempted to identify common indicators of higher or lower stress levels. Results indicated that level of stress were higher than average. Additionally, tenure status was the only variable of interest significantly associated with advisor stress levels. However, other factors such as time spent advising undergraduate research, preparing for class, overseeing psi chi administrative business, and working on service activities all proved to significantly increase reported stress levels.

CHAPTER I

Problem Statement & Research Questions

Over the past twenty years studies involving the effects of occupational stress have repeatedly demonstrated the negative effects of stress upon employees. These negative consequences include physical symptoms such as headaches, psychological symptoms such as depression and burnout as well as behavioral and organizational symptoms such as alcohol abuse and absenteeism (Byers, 1987). Faculty members are highly vulnerable to the effects of occupational stress and in turn their productivity and wellbeing may suffer. Psi Chi faculty advisors may be at particular risk for high levels of occupational stress due to the demands on time as a result of leading their chapters. The combined responsibilities of research, teaching and service add weight to an already heavy load (Thorsen, 1996). A recent article published in the *Eye on Psi Chi*, indicates the various challenges which advisors are confronted with on a regular basis (Domenech Rodríguez & McDougal, 2008). The most reported challenge was a lack of time to do the tasks that the position required. However, these findings were incidental as the authors did not look to directly assess stress, but rather "discovered it" in the process of asking about other matters.

The present study used the Job Stress Survey developed by Spielberger and Vagg (Spielberger, Reheiser, & Vagg, 2000) to measure overall stress levels and to pinpoint prominent sources of stress among Psi Chi advisors nationwide. Professional title (i.e., Assistant, Associate, Full), years in profession, tenure status, and scholarly productivity were also assessed in hopes of discovering possible correlates to occupational stress.

Research Question 1

What are the levels of stress of faculty advisors in Psi Chi?

Research Question 2

What is the relationship between job stress, intensity of stress, and severity of stress for Psi Chi faculty advisors as measured by the JSS?

Research Question 3

Is there a significant relationship between scores on the JSS and the faculty-specific variables of tenure track status, professor rank, years working in the field, and scholarly productivity? There is some suport in the literature for hypothesizing that less experienced faculty member would exhibit greater job stress (Hogan, Carlson, & Dua, 2002. However, previous research has shown mixed results concerning differences in stress experienced by employees of different occupational levels (Spielberger & Reheiser, 1994; Spielberger et al. 2000). Reatedly, there is evidence to support the hypothesis that untenured professors were more stressed than their tenured colleagues (Thorsen, 1996). It seems likely that professors would experience a certain amount of stress relief due to the increased security of their jobs as a result of attaining tenure.

By learning more about the common sources and levels of stress among advisors, we hoped to come to an understanding of the current situation and make recommendations to reduce the negative symptoms associated with such stress. Improvements in stress levels among advisors could lead to improved physical and psychological health as well as higher quality leadership and guidance for student members of Psi Chi.

CHAPTER II

Methods

Psi Chi faculty advisors from chapters across the nation were recruited to complete the survey. According to the Psi Chi National Office there were 1093 chapters at the time recruitment efforts began. Recruitment was conducted by the Psi Chi Central Office. The Central Office sent an e-mail to all registered faculty advisors through email. An e-mail generated from the Central Office was meant to protect faculty advisors from any unwanted contact by the researchers as well as maximize the protection of confidentiality. A USU IRB approved email (IRB approval #2190) was sent to all Psi Chi faculty advisors in December of 2008 asking for their participation in the research study. The Central Office sent out a reminder email to all advisors two weeks after the initial request for participation. The survey remained open for a little over four weeks before closing. The email (Appendix A) included a link to surveymonkey.com where the survey was posted.

Faculty were offered an incentive of ten dollars in the form of an electronic gift card was offered to those who completed the survey by the specified deadline. While the incentive might seem excessive for such a potentially large sample, prior Psi Chi studies have reported low response rates (Bailey & Domenech Rodríguez, 2007; McDougal & Domenech Rodríguez 2008). There was a concern that the most stressed advisors would decline participation, thus limiting our ability to truly understand the levels of stress experienced by our advisors. The final number (N = 340) of responses indicates about a 31% response rate among advisors. The response rate was limited by financial constraints which resulted in closing the survey after being open for only one month. There was a total of \$3,200 available to pay for faculty incentives in

the budget. That would have allowed for 320 participants, however some participants declined the incentive, which resulted in the ability to enroll the total final sample.

Instruments

General Demographics. The first section of the survey consisted of a questionnaire regarding general demographic information as well as a number of specific variables of interest including years in the profession, scholarly productivity, tenure status, and professor rank. Scholarly productivity was based on two items assessing the number of articles or poster/paper presentations authored or co-authored during the last year. Unfortunately a more complete assessment of faculty advisor productivity (e.g., curriculum vitae review) proved impractical. In addition to the previously mentioned factors, hours per week spent on several important activities was assessed on a categorical scale ranging from 1 (0 hours) to 6 (20+ hours). These activities included supervising undergraduate research, supervising graduate research, teaching classes, preparing for classes, conducting personal research, working on Psi Chi administrative business, and working on service activities.

Job Stress Survey. The JSS was administered after demographic information had been obtained. This measure was developed to assess both the frequency and severity of commonly experienced job stressors (Vagg, Spielberger, & Wassala, 2002). The JSS provided us with a total stress index score and aided in pinpointing problematic sources of stress among the advisors. The JSS is divided into subscales assessing both job pressure and lack of organizational support. Previous research indicate coefficient alphas for the various subscales range from .75 to .80 (Connell, Lee, & Spector, 2004). For the current study, coefficient alpha was .94 for the total index score, .95 for the severity scale, and .91 for the frequency scale. The entire survey used for this study took an average twenty minutes to complete.

The Job Stress survey first evolved from a measure designed to assess stress among law enforcement officers. This measure, known as the Police Stress Survey (PSS), was developed to assess the severity and frequency of occurrence of sixty specific stressors. As a reaction to the conflicting research findings regarding gender differences in occupational stress, Spielberger and Vagg modified the PSS to create the Job Stress Survey (JSS; Spielberger & Reheiser, 1994). This thirty-item measure was designed to assess both the perceived intensity and frequency of working conditions believed to affect the psychological wellbeing of employees in any profession. Participants completing this measure are first asked to rate the severity of each stressful event listed on a nine point scale. Second, participants are asked to indicate on a nine point scale how many days (0 to 9+) in the last six months they have experiences each of the listed stressful events. Subscale scores for both severity and frequency are computed by simply summing the ratings for each subscale. Overall stress scores are then computed by multiplying the frequency scores by the severity scores (Spielberger & Reheiser, 1994).

Reliability. An article by Spielberger and Reheiser reports the alpha coefficients of the severity, frequency and total index scores to be from .71 to .93. This indicates that internal consistency for this measure is adequate. (Spielberger & Reheiser, 1994).

Validity. Content validity for this measure may have been in part established through the use of the Police Stress Survey and Teacher Stress Surveys used in its development. Information supporting the validity of these measures was previously made available by Spielberger Westberry & Greenfield (1981), and has been shown to measure occupational stress within their intended areas. Using many of the same items may lend support to the content validity of this measure, however, it should be noted that the JSS was designed for a more universal use. An attempt at creating a measure for all professions creates difficulties in determining items that are

relevant to all professions (Rick et al., 2001). Construct valisdity was assessed through an exploratory factor analysis. This indicated two major scales within the JSS measure. First, organizational support, which concerns the employees perception of aid offered by their employing organization. Second, job pressure which is a measure of the employees percieved pressure from indivudual stressors. The two resulting scales confirm the theory around which the JSS was structured. This confirmation provides evidence for the consruct validity as well as the content validity of the JSS. However evidence provided by a single factor analysis may be condidered somewhat weak (Spielberger & Reheiser, 1994).

CHAPTER III

Results

Demographic information is presented first, followed by results that answer the research questions outlined above. Demographics for this sample consisted of a majority of white (88.8%), married (77.2%), Ph. D. or Psy.D. holders (97.7%), with an average age of 44.2 years. Most participants (38.1%) identified themselves as Assistant Professors, 34.8% as Associate Professors, 28.6% as full Professor, and 4.1% as "other," which consisted of a majority of lecturer positions. The majority of participants (89.8%) were in tenure track positions and 57.3% were tenured at the time of the survey. Differences in the mean age, months as an advisor, months in the current profession, and articles and posters/papers authored or coauthored in the last year are presented in table 1. Time spent on various activities presented in table 2. Additionally, Psi Chi has six main regions (see http://www.psichi.org/Regions/). In the current sample, the East, Southeast and Midwest chapter regions accounted for most of the respondents. These responses are proportional to the amount of members in each region.

Differences across groups within variables were evaluated using analyses of variance (ANOVAs). The average age of the advisors participating in the study was 46.7 and 42.7 for males and females respectively. Differences in the mean age of males and females were statistically significant, (F (1, 335) = 12.10, p = <.001). Men had generally spent more time in both their current positions, (F (1, 340) = 12.03, p = <.001) and as Psi Chi advisors, than women (F (1, 340) = 11.33, p = <.001). Significant differences in assessed productivity were found between men and women with men authoring or co-authoring more articles during the preceding

year, (F(1, 336) = 6.40, p < .05). These findings point to the importance of considering gender in subsequent analyses.

Table 3 displays sample percentages as well as characteristics by gender as assessed using Chi-square. Significant differences were identified between gender and each professional level (χ^2 (3, N = 339) = 20.480, p = <.001). There were more female Assistant and Associate Professors and more male full Professors. The majority of participants (89.8%) were in tenure track positions and 57.3% were currently tenured. Significant differences between men and women were observed with men being more likely than women to be tenured (χ^2 (1, N = 338) = 8.837, p = <.01), or on a tenure track position, χ^2 (3, N = 334) = 4.790, p = <.05. The majority of the sample, 83.7% believed that Psi Chi had no impact on their publication record or their quality of teaching. Exactly half (50%) of advisors felt that their role as Psi Chi faculty advisors had enhanced their academic positions while 16% felt that it had been problematic.

Table 1.

Sample Characteristics by Gender and for the Total Sample of Psi Chi Faculty Advisors in the US (N=340) for total sample, males, and females, and ANOVA results for between group differences

Variable		Total	Male	Female	F
Age in years	M	44.24	46.74	42.71	12.10***
	SD	10.45	10.83	9.95	
	N	335	127	207	
Months as Psi Chi Advisor	M	77.75	96.21	66.42	11.33***
	SD	80.30	89.59	71.94	
	N	340	129	210	
Months in Current Profession	M	154.04	184.31	135.45	12.03***
	SD	127.94	131.83	122.13	
	N	340	129	210	
Articles in the last year	M	1.61	1.96	1.39	6.40*
	SD	2.02	2.42	1.71	
	N	336	127	208	
Posters/papers in the last year	M	2.68	2.99	2.48	2.06
	SD	3.17	3.42	3.01	
	N	337	128	208	

Table 2.

Sample characteristics of Psi Chi faculty advisors in the US (N=340) for total sample, males, and females, and ANOVA between groups.

Hours spent on:		Total	Male	Female	F
Undergraduate research	M	2.61	2.70	2.56	1.61
	SD	0.99	0.93	1.02	
	N	338	129	208	
Graduate research	M	1.51	1.46	1.54	0.64
	SD	0.93	0.82	0.99	
	N	340	129	209	
Teaching	M	4.31	4.29	4.33	0.31
	SD	0.72	0.71	0.73	
	N	338	129	208	
Preparing for class	M	4.02	3.81	4.16	8.82**
	SD	1.07	1.12	1.02	
	N	340	129	210	
Personal research	M	2.74	2.94	2.62	5.14*
	SD	1.27	1.28	1.24	
	N	340	129	210	
Psi Chi administration	M	1.91	1.84	1.95	2.54
	SD	0.58	0.58	0.58	
	N	337	128	208	
Service activities	M	2.96	2.95	2.97	0.02
	SD	0.99	1.03	0.96	
	N	339	128	210	

 $[\]overline{* = p < .05, ** = p < .01, *** = p < .001}$

Table 3.

Chi-Squared Tests of Independence for Sample Characteristics by Gender for the Total Sample of Psi Chi Faculty Advisors in the US (N=340)

	N	Male	Female	Total	χ2	df	p- value
Ethnicity (% white)	300	89.1%	88.5%	88.8%	2.915	5	.713
Marital Status (% married)	261	82.8%	73.7%	77.2%	5.085	4	.279
Degree	340						
MA/MS	8	1.6%	2.9%	2.4%	1.334	3	.721
PhD/PsyD	271	79.9%	79.5%	79.7%			
PhD w/ fellowship	61	18.6%	17.6%	18.0%			
Professional title	340						
Assistant	114	26.4%	38.1%	33.6%	20.480	3	<.001
Associate	114	31.8%	34.8%	33.6%			
Full	98	41.1%	21.0%	28.6%			
Other	14	0.8%	6.2%	4.1%			
Tenure track (% yes)	334	94.4%	87.0%	89.8%	4.790	1	.029
Tenured (% yes)	338	67.4%	51.0%	57.3%	8.837	1	.003
Chapter Region	339						
East	107	28.1%	33.8%	31.7%	6.348	6	.385
Midwest	89	29.7%	24.3%	26.3%			
Rocky Mountain	16	3.1%	5.7%	4.7%			
Southeast	68	17.2%	21.4%	19.8%			
Southwest	3	11.7%	8.1%	9.5%			
West	24	8.6%	6.2%	7.1%			

Don't know	3	1.6%	0.5%	0.9%			
Impact on publication record	338						
% Publish more	8	3.1%	1.9%	2.4%	.511	2	.775
% no impact	283	82.8%	84.2%	83.7%			
% Publish less	47	14.1%	13.9%	13.9%			
Impact on teaching	340						
improved	72	27.1%	17.6%	21.2%	4.695	3	.196
worsened	6	1.6%	1.9%	1.8%			
same	248	66.7%	76.7%	72.9%			
other	14	4.7	3.8	4.1			
Role has enhanced academic position (% yes)	340	48.1%	51.9%	50.4%	.472	1	.492
Role has been problematic in my academic position (%yes)	340	15.5%	16.2%	15.9%	.028	1	.867

^{* =} p < .05, ** = p < .01, *** = p < .001

Research Questions 1 & 2

The first research question was: What are the levels of stress of faculty advisors in Psi Chi? The mean JSS stress index score for Psi Chi faculty advisors was 22.92 with a standard deviation of 12.11 (see table 1). In a sample assessing stress among managerial/professional, clerical/skilled maintenance and senior military personnel mean stress index scores ranged from 19.36 to 22.13 (Spielberger & Vagg, 1999). Scores from the current sample are somewhat high though still within in the general expected range of expected stress index scores.

As for the second research question – what is the relationship between job stress, intensity of stress, and severity of stress for Psi Chi faculty advisors as measured by the JSS?- a correlation grid showed highly significant correlations between the three consructs (see table 4). Independent samples t-tests revealed no significant differences between males and females for JSS frequency, severity, or index scores.

Table 4

Correlations between job stress, intensity of stress, and severity of stress for Psi Chi Faculty Advisors.

	Job stress	Intensity	Severity
Job Stress	1.0		_
Intensity	.910**	1.0	
Severity	.657**	.407**	1.0

Finally, research question three asked: Is there a significant relationship between scores on the JSS and the faculty-specific variables of tenure track status, professor rank, years working in the field, and scholarly productivity? Pearson correlations and analyses of variance (ANOVAs) were employed to determine the relationship between the variables of interest and the JSS index score. Tables 5 and 6 report the findings for our sample. Of the main variables of interest which included age, professor rank, years in profession, tenure track, being currently tenured, and scholarly productivity, only being tenured was significantly related to JSS. However, the direction of the relationship seems to be opposite of that predicted with those who are tenured experiencing more stress than those who are not (F (1, 194) = 4.489, p < .05).

While our main variables of interest do not seem to be reliable indicators of advisor stress levels, other significant indicators of such stress were found. The results of the Pearson correlations reported in table 5, revealed a significant positive relationship between stress level and time spent advising undergraduate research r = .119, p = .029. However, this relationship did not hold for hours spent advising graduate research. Hours spent teaching neared significance, r = .103 p = .059, and hours spent preparing for class, dealing with Psi Chi administration, and on service activities were all significant at r = .227, p < .001, r = .199, p < .001, r = .231 p < .001 respectively.

In table 6, analyses of variance revealed that those who feel their role as a Psi Chi faculty advisor has had an impact on their publication record experience significantly different levels of occupational stress. Those who believe that their role as an advisor has had a positive impact on their publication record reported a mean index score of 20.92 (F (2, 8) = 5.14, p = <.01). Those advisors who felt that their role had no impact on their publication record reported an average index score of 22.16 (F (2, 283) = 5.14, p = <.01). Those who felt that their role as a Psi Chi advisor had a negative impact on their publication record, reported an average JSS index score of 27.91 (F (2, 47) = 5.14, p = <.01), indicating that those who attribute publishing less to their involvement in Psi Chi, experience especially high levels of occupational stress compared to those who make no such attributions. Also, those who reported that their role as a Psi Chi faculty advisor had been problematic in their academic position were found to experience significantly more stress (F (1, 54) = 42.79, p = <.001) than those who do not perceive their role to be problematic in their positions.

Table 5.

Correlations between Population Characteristics and JSS Index Score (N=340)

	N	Pearson r
	·	JSS Index
Age	335	008
Months as Psi Chi Advisor	340	.091
Months in Current Profession	340	.005
Articles authored/coauthored in the last year	336	055
Posters/papers authored/coauthored in the last year	337	.008
Hours spent on:		
Undergraduate research	338	.119*
Graduate research	339	.042
Teaching	338	.103
Preparing for class	340	.227***
Personal research	340	022
Psi Chi administration	337	.199***
Service activities	339	.231***

^{* =} p < .05, ** = p < .01, *** = p < .001

Table 6. Analysis of Variance for Sample Characteristics by JSS Index of Psi Chi Faculty Advisors in the US (N=340)

	Mean JSS	SD	N	df	F
	Index				
Male	22.18	12.11	129	1	.85
Female	23.38	11.33	210		
Ethnicity	•				
White	22.97	11.77	301	1	.22
Other	22.04	10.87	39		
Marital Status					
Single	22.94	12.04	47	2	.01
Married	22.87	11.76	261		
Other	22.63	10.59	32		
Tenure track					
Yes	22.90	11.72	300	1	.016
No	23.17	11.55	34		
Currently tenured					
Yes	24.01	11.94	194	1	4.49*
No	21.31	11.14	144		
Highest Degree					
MA/MS	21.77	16.32	8	2	2.24
PhD/Ps-D	22.26	11.20	271		
Plus Fellowship	25.71	12.74	61		
Professional Title					
Assistant	20.98	10.67	114	3	2.28
Associate	24.70	12.06	114		
Full	22.51	12.03	98		
Other	25.77	11.94	14		
Impact on publication record					
% Publish more	20.92	11.21	8	2	5.14**
% no impact	22.16	11.11	283		
% Publish less	27.91	13.81	47		
Impact on teaching quality					
Improved	24.13	11.60	72	3	1.36
Worsened	26.16	9.16	6		
Same	22.71	11.89	248		
Other	17.75	6.89	14		
Role enhanced position					
Yes	22.79	11.25	171	1	.014
No	22.94	12.08	169		
Role problematic					
Yes	31.85	12.64	54	1	42.79***
No					

^{*=}p<.05, **=p<.01, ***=p<.001

Table 7 displays the results of a simple linear regression model controlling for both gender and professional title. Gender and professional title were controlled for in all regression models to ensure consistency with previous studies on occupational stress and those using the JSS. In the simple model controlling only gender and professional title; tenure status, highest degree completed, perception of whether Psi Chi had been problematic in their career, hours spent on undergraduate research, class preparations, Psi Chi administration, and service activities were all significant. Table 8 displays the results of a more complex regression model which included all of the variables listed above as significant. Each variable was once again significant with the exception of "highest degree" and hours spent on Psi Chi administration.

Table 7. Multivariate Regression Models Stress Contributors of Interest Stress (N=340)

	N	В	SE B	β
Professional title	340	.657	.741	.050
Tenured tracked	334	.400	2.159	.010
Currently tenured	338	-4.665	1.952	199*
Months as Psi Chi Advisor	340	.015	.009	.101
Months in Current Profession	340	001	.006	010
Articles authored/coauthored in the last year	336	266	.319	046
Posters/papers authored/coauthored in the last year	337	.041	.202	.011
Highest Degree	340	2.935	1.489	.107*
Hours spent on:				
Undergraduate research	338	1.354	.643	.115*
Graduate research	339	.481	.648	.038
Teaching	338	1.588	.880	.098
Preparing for class	340	2.352	.587	.216***
Personal research	340	170	.505	019
Psi Chi administration	337	4.243	1.092	.211***
Service activities	339	2.713	.634	.230***
Psi Chi advisor role has been problematic in my academic position	340	-10.626	1.629	335***

Note: All models control for gender and professional title *=p<.05, **=p<.01, ***=p<.001

Table 8. Multivariate Regression model of Significant covariates and JSS index Score (N=340)

	N	В	SE B	β
Currently tenured	338	-6.206	1.768	263***
Highest Degree	340	1.222	.071	.083
Hours spent on undergraduate research	338	1.240	1.586	.105*
Hours spent on preparing for class	338	2.145	.547	.195***
Hours spent on Psi Chi administration	337	1.768	1.035	.088
Hours spent on Service activities	339	2.275	.583	.192***
Psi Chi advisor role has been problematic in my academic position	337	-9.163	1.582	290***

Note: model includes all coefficients above plus gender and professional title *=p<.05, **=p<.01, ***=p<.001

Discussion

Results indicate that the level of stress experienced by Psi Chi faculty advisors who are tenured is significantly higher than that experienced by non-tenured advisors. Our original prediction was that those advisors who had not yet achieved tenure would experience significantly more stress than those who had, due to added pressure and expectations from their department to publish. However in contrast to Thorson (1996), this may not be the case among Psi Chi faculty advisors. Perhaps those advisors who have attained tenure feel an added responsibility to continue to publish at a high rate to compete with upcoming or older faculty. Alternatively, the fact that non-tenured faculty are typically exempt from service activities or are just beginning to engage in them, could play a significant role in this unexpected relationship. In other words, it could be that those faculty who are involved in more service are more worn out and have added constraints on their time due to service commitments resulting in higher levels of stress. It might also be true that those advisors who are more likely to be tenured are simply prone to higher levels of stress. High achievement aspirations may be more common among highly stressed advisors who are also more likely to become tenured. Future research might benefit from taking such possibilities into account.

It was expected that younger faculty advisors would experience higher levels of occupational stress than their older colegues as previously shown by (Hogan et al.,2002). However, results failed to indicate that years spent in one's profession serves as an indication of stress level. It was also expected that faculty advisors who were more productive in terms of research output would be experience lower levels of stress. During the design of the survey used for this study it became clear that assessing total career productivity would be extremely difficult as well as problematic for participants asked to report such information. To deal with these

practical limitations participants were instead asked to report the number of articles, posters, and papers authored or co-authored during the previous year. Analyses failed to show any difference between highly productive and less productive advisors and stress index score. This could indicate that productivity is not a reliable predictor of stress or that the method utilized to assess productivity for this study was inadequate. Future research might seek to provide a better assessment of advisor productivity and its relation to stress by gathering information from curriculum vitae.

Professional title was not significantly associated with advisor stress scores. Although (Vagg, Spielberger, & Wassala, 2002) found that occupational level was a significant predictor of stress, this does not seem to apply for Psi Chi faculty advisor positions. This may be due in part to the similarities in responsibilities among faculty members.

While many of the variables predicted to be associated with advisor stress levels are not reliable indicators of occupational stress, a number of other factors assessed in the survey seem to be. Hours spent advising undergraduate research is significant predictor of stress levels of faculty advisors. This may be due to the inexperience and greater required supervision of undergraduate students. Being farther along in their education, graduate students may often require less "hands on" attention to complete their research as compared to undergraduate students. The added responsibility and frustrations of advising less experienced undergrads may result in significant increases in advisors' perceived levels of occupational stress. It may also be that advisors experience different mentoring loads between undergraduate and graduate students. A naturally larger number of undergraduate student in need of advising means that advisors may simply have more overall work to do when compared with graduate mentor responsibilities. It is also likely that undergraduate students require more time and effort than their graduate student

counterparts due to differences in skills. Further research will be needed to determine the cause of this stress relationship which may in turn indicate effective approaches to dealing with advisor stress resulting from student mentoring relationships.

Hours spent on teaching and hours spent preparing for class was also shown to be significantly related to stress levels. It may be that advisors with a heavier class loads spend more time on these two stressful activities and suffer as a result. However it may be that those advisors who are naturally prone to experience and interpret responsibilities as stressful are more likely to find opportunities to teach and spend more time preparing for class.

Hours spent on Psi Chi administration business and on service activities were also significant predictors of stress. Those advisors who spent more time on either activity reported much higher levels of stress than those who spent less time on them. Psi Chi administration business, like supervising undergraduate research, may be particularly stressful because of the effort required to advise inexperienced undergraduate students. The fact that Psi Chi council members change on an annual or biannual basis ensures that they are relatively inexperienced and need considerable supervision. Service activities are often related to Psi Chi service, fundraising or educational activities. This may be another indicator of the high level of stress involved with Psi Chi advising.

In a study conducted by Arnetz (2005), clarification of organizational goals was found to be an important moderator of stress experienced among hospital personnel. Those employees in departments with poor goal clarity experienced significantly more stress than their colleagues. Arnetz suggests this may be due to feelings of ambiguity concerning the future that in turn hamper employees' ability to be proactive in their respective positions. Through improvements made by the Psi Chi Central Office to clarify organizational goals and help advisers clarify

chapter goals, adviser stress levels might be successfully reduced. In turn, this would be likely to improve overall organizational effectiveness.

A study by Bellarosa and Chen (1997) evaluated several occupational stress management interventions. Results indicated that relaxation training was the most effective of the interventions assessed. Relaxation training was also found to be the most cost effective, easily implemented and required the shortest training period to implement. Perhaps nationwide web based relaxation trainings could function to reduce stress levels among both Psi Chi faculty advisers and Central Office employees.

To reduce the stress involved with the responsibilities mentioned above, the National Office might seek to implement suggestions given by study participants. The largest number of suggestions by Psi Chi advisors recommended the Central Office improve the information given to advisors and students on roles, responsibilities, ideas for activities and fundraising, and deadlines (n=47). Another suggestion included financial help involving advisor compensation, support for research, and funding in place of chapter fundraisers (n=21). Advisors also suggested improving communication within Psi Chi through an advisor list serve, social/discussion time at conferences, and more succinct emails from the National Office (n=21). A number of participants proposed improvements of administration through measures aimed to reduce paper work. To accomplish this, advisors recommended requiring students to file their own records online, having students pay one fee to the Central Office online, and making paperwork less confusing and more consolidated (n=21). Finally, some suggested that giving more recognition for their service might help to reduce stress levels experienced as a Psi Chi advisor (n=12).

Results showed that a Psi Chi advisors' belief that their role has been problematic in their academic position reliably predicts a high level of reported stress. Thus attributing problems in

ones position to involvement with Psi Chi is a significant predictor of high level occupational stress. Future research in this area might focus on discovering how faculty members came to be Psi Chi advisors. Those who were appointed by their departments may perceive personal stress associated with the position differently than those who were nominated by students. If this is the case, the Psi Chi Central Office might improve perceptions of Psi Chi involvement by communicating with department heads that the chapter advisor should be appointed by the students. It may also be that those advisors who are more likely to attribute Psi Chi involvement to stress are naturally more stressed individuals who are likely to consider almost any activity or involvement problematic for their academic position. Additionally, attributions of the impact of Psi Chi involvement on ones publication record was shown to be a significant predictor of overall stress levels. Those advisors who believe that their involvement with Psi Chi has had a positive impact on their publication record in that they now publish more, have significantly lower stress index scores than others. Advisors who believe that Psi Chi has had no impact on their publication record seem to be slightly more stressed and those who attribute their involvement in Psi Chi their publishing less, suffer from relatively high levels of occupational stress.

In the regression model controlling for gender and occupational title, all of the previously mentioned variables were again significant with the exception of hours spent teaching. This may show that the time an advisor spends teaching class in not as reliable predictor of stress as is the amount of time that advisor spends preparing for class. Class preparation is a flexible responsibility which can consume either a considerable amount or minimal amount of time depending on the instructor. It may be that those advisors who spend more time preparing for class care more about the quality of their work than their less stressed colleagues. The advisor

who spends great amounts of time preparing for classes may be more likely worry about the quality of their work in all responsibilities making them more prone to stress in general. In this same simple model, degree obtained appeared to be a significant predictor of stress among advisors. For this model, those with a doctorate or a postdoctoral fellowship appeared to be more stressed than those advisors holding only a Master's degree.

A limitation for the current study is its applicability only to Psi Chi faculty advisors. Stress levels among those who volunteer for a position in Psi Chi may differ greatly from those faculty members who decide not to take on similar responsibilities. With utilizing a web based volunteer survey, comes the danger of volunteer bias as well. It is possible that the most stressed Psi Chi advisors are the most likely to respond to a survey about stress in hopes that the results will encourage the Central Office to make helpful changes. Alternatively, it may be that the most stressed advisors are the least likely to reply because of their perceived lack of time and their desire to reduce responsibility related stressors. Both of the aforementioned factors may bias the results of this study. It may be that the time commitment necessary to participate in the study resulted in many of the incomplete surveys that were submitted. It is possible that important responses that may have contributed to the results were lost to the exclusion of surveys that were incomplete. Is also possible that those who submitted incomplete surveys did so because of stress and a lack of time resulting in reduced power for the results discovered in the analyses. Finally, the current study failed to provide meaningful comparisons to faculty members not involved in Psi Chi. Stress levels for Psi Chi faculty advisors may not significantly differ from other faculty members who are faced with many of the same stressful events. In fact, 35 respondents answered that Psi Chi was not stressful when asked what the Central Office might do to reduce stress level.

Further research is necessary to discover whether Psi Chi advisors truly experience higher levels of stress due to their involvement in Psi Chi.

Conclusion

In summary, Psi Chi Advisors who were currently tenured, spent more hours on mentoring undergraduate research, preparing for class and on service activities, and that viewed their role as a Psi Chi advisor as problematic reported higher stress levels. Of the original variables of interest, only advisors who were currently tenured reported significantly higher levels of stress than those who were not tenured. Professional level, years in the profession, and measures of productivity were not significantly associated with JSS stress index scores. Other variables related to stress not outlined in the original hypothesis included: viewing the position as problematic and more hours spent on preparing for class, mentoring undergraduate research, and participating in service activities. While perceptions of Psi Chi involvement seem to be a reliable predictor of stress, the other significant variables all involved time spent on various responsibilities. It may be that the specific activity advisors are engaged in is a less important contributor to stress than how much total time advisors spend on any work related activities.

References

- Arnetz, B. B. (2005). Subjective indicators as a gauge for improving organizational well-being. an attempt to apply the cognitive activation theory to organizations.

 *Psychoneuroendocrinology, 30, 1022–1026.
- Bailey, M. A., & Domenech Rodríguez, M. M. (2007). The role of faculty advisors in the success of Psi Chi chapters: Leadership characteristics and student organization success. *Eye on Psi Chi*, 11(2), 25-29.
- Bellarosa, C., & Chen, P. Y. (1997). The effectiveness and practicality of occupational stress management interventions: A survey of subject matter expert opinions. *Journal of Occupational Health Psychology*, 2(3), 247-262.
- Byers, S. K. (1987). Organizational stress: Implications for health promotion managers.

 American Journal of Health Promotion, 2(1), 21-27.
- Connell, P., Lee, V. B., & Spector, P. E. (2004). Comprehensive handbook of psychological assessment. Hoboken: John Wiley & Sons, Inc.
- Domenech Rodríguez, M. M., & McDougal, K. (2008). Faculty advisors' voices: Challenges in leading local chapters. *Eye on Psi Chi*, 12(4), 20-23.
- Hogan, J. M., Carlson, J. G., & Dua, J. (2002). Stressors and stress reactions among university personnel. *International Journal of Stress Management*, 9(4), 289-310.
- McDougal, K., & Domenech Rodríguez, M. M. (2008). Factors affecting Psi Chi members' satisfaction with research opportunities. Retrieved April 21, 2008, from http://www.psichi.org/awards/winners/hunt_reports/mcdougal.asp

- Pelletier, K. R., & Lutz, R. (1988). Healthy people healthy business: A critical review of stress management programs in the workplace. *American Journal of Health Promotion*, 2(3), 5-12, 19.
- Psi Chi (2002). *Psi Chi Constitution*. Retrieved August 22, 2008, from http://www.psichi.org/about/constitution.asp
- Rick, J., Briner, R., Daniels, K., Perryman, S., & Guppy, A. (2001). *A critical review of psychosocial hazard measures*. Contract Research Report 356/2001. Brighton, England: Institute for Employment Studies for the Health and Safety Executive, University of Sussex.
- Spielberger, C. D., Reheiser, E. C., Reheiser, J. E., Vagg, P. R. (2000). Measuring stress in the workplace: The job stress survey. *Stress and Health; Research and Clinical Applications*, 397-409.
- Spielberger, C. D., & Reheiser, E. C. (1994). Job Stress in University Corporate and Military Personnel. *International Journal of Stress Management*, 1(1), 19-31.
- Spielberger, C. D., Reheiser, E. C. (1994). The job stress survey: Measuring gender differences in occupational stress. *Journal of Social Behavior and Personality*, *9*, 199-218.
- Speilberger, C. D., Vagg, P. R., (1999). Manual for the Job Stress Survey (JSS): Professional edition. Odessa, FL: Psychological Assessment Resources.
- Spielberger, C. D., Westberry, L. G., Grier, K. S. Greenfield, G. (1981). Police Stress Survey sources of stress in law enforcement. (Monograph Series Three, No.3). Tampa, FL:

 College of Social and Behavioral Sciences, University of South Florida.
- Thorsen, E. J. (1996). Stress in academe: What bothers professors? *Higher Education*, 31, 471-489.

- Tytherleigh, M. Y., Webb, C., Cooper, C. L., & Ricketts, C. (2005). Occupational stress in UK higher education institutions: A comparative study of all staff categories. *Higher Education and Research*, 24(1), 41-61.
- Vagg, P. R., Spielberger, C. D., & Wassala, C. F. (2002). Effect of organizational level and gender on stress in the workplace. *International Journal of Stress Management*, 9(4), 243-261.

Appendix A

E-mail Requesting Participation.

Dear Psi Chi faculty advisors,

Tristan Nelson and Melanie Domenech Rodríguez in the Department of Psychology at Utah State are conducting research to examine occupational stress among Psi Chi faculty advisors. The purpose of this research is to understand general levels and sources of stress for faculty advisors and provide recommendations to the Psi Chi National Office on how to best support advisors. We are requesting your participation. You will be asked to complete an on-line survey at

https://www.surveymonkey.com/s.aspx?sm=paICtLdm0gR 2fbKbjC6S7dw 3d 3d?subjec t=Advisor Stress Survey

(If the entire web address is not a link, copy and paste the entire web address into the web address line in your browser)

The survey will take an average of 15 minutes to complete. After completion, you will receive \$10 for your participation in the form of a gift certificate to the store of your choosing (Barnes & Noble, Target, Amazon.com, Wall mart).

For any questions please contact Tristan at t.n@aggiemail.usu.edu or Melanie at melanie.domenech@usu.edu.

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Author's Biography

Tristan Nelson was raised in Bear River City Utah and graduated in 2002 from Bear River High School. Tristan spent two years serving a full time mission for the LDS church and enrolled at Utah State University upon returning in the fall of 2005. Tristan began his undergraduate education with interests in both business and psychology. After taking Dr. Scott Bates' psychology 1010 course Tristan decided to declare psychology as his major with a goal of someday earning a Ph. D. in Industrial/Organizational Psychology. In 2005 Tristan served as the public relations chair for the Portuguese club and subsequently became a member of Psi Chi, the national honors society in psychology, in 2007. Tristan joined the departmental Honors program later that year and has conducted research involving punishment and leadership as part of his course contract work. In 2009 Tristan was inducted into the Phi Kappa Phi chapter at USU and was named the valedictorian for the department of Psychology for spring commencement 2009.

Tristan will continue his education with plans to earn a Ph. D. in the area of Industrial/Organizational Psychology. He will begin his graduate work at Colorado State University in fall 2009. After graduation, Tristan plans to work as an internal I/O consultant for a corporation with an emphasis on Occupational Health Psychology.