

Levels of Psychological Capital and Job Stress among State Auditors in Davao Region, Philippines

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Abstract: State auditors play a vital role in enabling government agencies amidst demands from stakeholders. This study determined the level of psychological capital factors that influence the level of job stress among state auditors of the Commission on Audit in Davao Region, Philippines. Quantitative research design, specifically descriptive-correlational method, was employed. An adapted survey questionnaire was used to gather data from 182 state auditors. Most of the respondents were 22-34 years old, female, married, without dependents, board/bar passers, less than 10 years in service, Audit Team Members, assigned in Local Government sector, earned not more than PhP49,999 a month, and travelled less than an hour to their workplace. Results revealed that respondents had very high degree of hope and resiliency; high degree of efficacy and optimism; moderately high degree of psychological demands; low degree of controlled decision latitude; and very low degree of social constraint in the workplace. There was a significant difference in the level of psychological capital when analyzed according to age, civil status, length of service, job title; and significant difference in the level of job stress when analyzed according to age. Psychological capital is negatively correlated with job stress. Optimism significantly predicts job stress among state auditors.

Keywords: job stress, psychological capital, state auditors

I. Introduction

State auditors play a vital role in enabling the government agencies. They experience pressure and demands from stakeholders to perform their mandate effectively which may lead to stress. Nevertheless, a right perspective and positive behavior could affect one's disposition in coping with job related stress.

The Commission on Audit (COA), the Supreme Audit Institution of the Republic of the Philippines, was faced with challenges, both as an organization and as an external auditor of the government. Audit work, by its very nature, can be demanding – there are many things to do with little time. The work often involves dealing with people under stressful and, sometimes, adversarial conditions. The rate of leave of absence, specifically sick leave, in the COA Davao Region in the year 2018 was observed to be high and mostly caused by fatigue and migraine, which were associated with job stress.

Psychological Capital, or simply PsyCap, first appeared in the literature in 2002. Luthans (2002) [1] highlighted the value of positive psychology to organizations. He emphasized the concept of positivity to the fields of leadership and organizational behavior. Luthans, Youssef, and Avolio, (2007) [23] described PsyCap as a person's optimistic psychological condition that is characterized by self-efficacy, optimism, hope, and resiliency.

High level of PsyCap translates into employee empowerment and better performance. This observation is true across professions, industries, and culture (Luthans, Norman, Avolio & Avey, 2008) [2]. Psychological capital stresses constructive methods vital to employee motivation, mental processing, and subsequent performance in the workplace (Malik, 2017) [3]. The focus of PsyCap is the good aspect of human life including hope, ingenuity, bravery, insight, accountability, among other things. If these positive human properties are appreciated, positive psychology will help shape a delightful environment (Luthans, Norman, Avolio, & Avey, 2008) [2]. Danish, Aslam, Shahid and Ali (2015) [4] believed that the differences discovered regarding psychological capital across length of service may occur due to the expectations that auditors who are longer in the firm are more hopeful, resilient, efficient and optimistic regarding their

work performance. Rauschenbach, Göritz, and Hertel (2016) [5] suggested that auditing firms provide long service program to highlight length of service and psychological capital.

A PsyCap training intervention was developed by Luthans, Avey, and Patera (2008) [6] and was found to increase both individually and collectively the levels of hope, efficacy, resiliency, and optimism in organizational and educational settings, and was related to both work and academic performances (Luthans & Youssef, 2004) [7]. It is interesting to note that auditors occupying high positions, those who are majority longer in service, place a greater hope and efficacy on the various work performance measure compared to the low position auditors and new in the service (Spies, 2016) [8].

Another construct, job stress, was extensively investigated in various areas of psychology and has shown to affect performance and mental and physical condition. To have a healthy, positive lifestyle, there is a need to understand stress (Ali, Raheem, Nawaz, & Imamuddin, 2014) [9]. The workplace is a chief source of stressful stimuli as well as vital resources to combat stress. Health risks and stress may be classified under content or context of work (Cousins, Mackay, Clarke, Kelly, C., Kelly, P. & McCaig, 2004) [10].

Stress is described as an adaptive response, mediated by personal differences or psychological processes, brought about by external action, condition, or incident that place undue psychological difficulties on a person. (Ali, Raheem, Nawaz, & Imamuddin, 2014) [9]. Researchers claim that stress from work comes from roles, too much work, limited time, work-family concerns and pressures from social influences (Jalagat, 2017) [11]. Conflict and ambiguity influence the Auditor's role which, in turn, unfavorably affects the auditor's ability to carry out his/her duty and impacts job performance.

Auditing is considered a very stressful profession. The very nature of the work is often stressful as it is typified by heavy workloads and due dates as well as conflicting demands (Lu, 2018) [12]. They are expected to produce quality outputs with limited budget and time. In public accounting, partners may try to minimize the time spent on jobs and as a result may create abnormal stress for their subordinates. Other stressors may include extensive work-related travels and frequently changing work locations (Larson & Luthans, 2016) [13].

The levels of psychological capital and job stress of state auditors need to be understood in order to broaden and build employee positive psychological capital by providing a happy workplace to help reduce stress. The study examined if PsyCap would have a similar relationship to stress in government setting.

1.1 Objectives of the Study

This study determined the levels of psychological capital and job stress among state auditors of the Commission on Audit (COA) in Davao Region, Philippines. Specifically, the study sought to:

1. Profile the respondents in terms of age, sex, civil status, number of dependents, highest educational attainment, length of service, job title, department assigned, gross monthly income, and distance from residence to workplace;
2. Determine the perceived level of psychological capital among respondents in terms of hope, efficacy, resiliency, and optimism;
3. Determine the level of job stress among respondents in terms of psychological demands, controlled decision latitude, and social constraint in the workplace.
4. Ascertain if there is a significant difference on psychological capital among respondents when analyzed according to profile.
5. Ascertain if there is a significant difference on job stress among respondents when grouped according to profile.
6. Determine if there is a significant relationship between psychological capital and job stress.
7. Identify which among the psychological capital factors significantly predict job stress.

1.2 Conceptual Framework

The schematic diagram of the study is shown in Fig. 1. The independent variable is psychological capital which was measured in terms of hope, efficacy, resiliency and optimism. The dependent variable is job stress which includes the following indicators: psychological demands, controlled decision latitude, and social constraint in the workplace. It is the contention of the framework that psychological capital may have significant relationship to job stress.

Moreover, the framework includes the profile of the respondents as to age, sex, civil status, number of dependents, highest educational attainment, length of service, job title, department assigned, gross monthly income, and distance from residence to workplace. The respondents' profile serves as moderator variable.

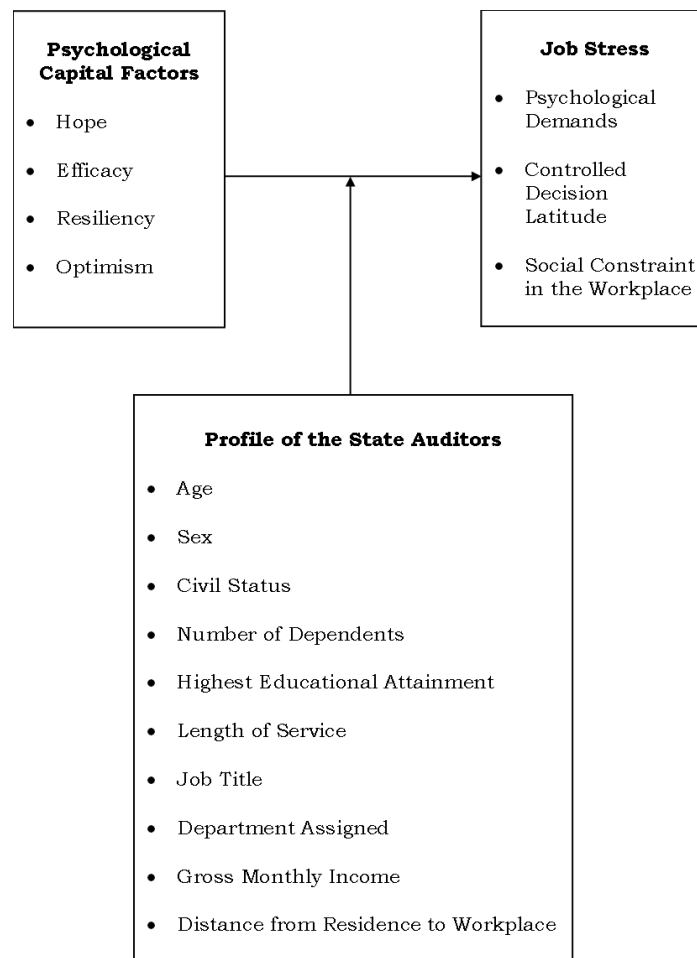


Figure 1. schematic diagram of the study

II. Methodology

This section covers the research design, sources of data and sampling technique, data gathering instrument, and statistical treatment.

1.3 Research Design

This study used quantitative research design. A study conducted by Imam, Ali and Soo (2017) [14] showed that 100 percent of the empirical research publications on PsyCap employed quantitative design. Specifically, this study utilized the descriptive-correlational research method. This method was used in describing the profile of the respondents and

the levels of PsyCap and Job Stress, determining the relationship of Job Stress and PsyCap, and identifying the PsyCap factors that influence job stress.

1.4 Sources of Data and Sampling Technique

This study used primary data obtained from the responses among auditors of the COA Davao Region, Philippines through an adapted survey questionnaire on PsyCap and Job Stress. The respondents of this study were 182 state auditors with permanent appointment assigned to audit agencies in the local government, national government, and corporate government sectors. The respondents were actively practicing the profession and working with a regular employment status thus, they were selected as they were all expected to be prone to job stress.

This research employed both complete enumeration and stratified random sampling. Accordingly, the auditors were grouped per type of audited agency or sector. This involved a representative sample from the audit sectors, namely: Local Government Sector, National Government Sector, and Corporate Government Sector. The respondents who were actively practicing the profession and working with a regular employment status, with assigned auditor's job title as Audit Team Member, Audit Team Leader, and Supervising Auditor/ Regional Supervising Auditor were considered in this study.

Based on record, there were 270 regular auditors assigned in the three sectors in COA Davao Region, Philippines. Total number of respondents was computed using the Yamane formula for computing the sample size: complete enumeration of 51 auditors in Corporate Government Sector were considered; 71 samples were taken from the Local Government Sector, and 60 samples were included from the National Government Sector, for a total of 182 respondents.

1.5 Data Gathering Instrument

The data were gathered through the use of an adapted psychological capital scale and job stress survey questionnaire. The research instrument was divided into three (3) parts- profile of respondents, level of psychological capital, and level of job stress.

The Psychological Capital Questionnaire (PCQ) developed by Luthans, Youssef and Avolio (2007) [23] was adapted in this study to measure the level of positive psychological capital factors of the respondents. It underwent thorough psychometric analyses, supported by samples representing various sectors (Imam, Ali, & Soo, 2017) [14].

PCQ is composed of 24 items comprising six items each for the four subscales of hope, efficacy, resiliency, and optimism. Some statements were modified by the researchers to fit the context. The Likert scale used to determine the level of psychological capital as perceived by the respondents is as follows: 5 - Strongly Agree (indicates that the respondent exhibits a very high degree of psychological capital); 4 - Agree (indicates that the respondent exhibits a high degree of psychological capital); 3 - Moderately Agree (indicates that the respondent exhibits a moderately high degree of psychological capital); 2 - Disagree (indicates that the respondent exhibits a low degree of psychological capital); 1 - Strongly Disagree (indicates that the respondent exhibits a very low degree of psychological capital).

For job stress, the recent use of instruments that evaluate psychosocial aspects of work has grown in the literature. The frequently used questionnaire in the United States, Canada, Europe and Japan is the Job Content Questionnaire (JCQ) comprising 49 questions in measuring job stress. A shorter and modified version of the Job Content Questionnaire is the Swedish Demand-Control-Support Questionnaire (DCSQ). This version consists of 17 items: five items for psychological demands, six items for controlled decision latitude, and six items for social constraint in the workplace.

The Likert scale used to determine the level of job stress as perceived by the respondents is as follows: 5 - Strongly Agree (indicates that the respondent exhibits a very high degree of job stress); 4 - Agree (indicates that the respondent exhibits a high degree of job stress); 3 - Moderately Agree (indicates that the respondent exhibits a moderately high degree of job stress); 2 - Disagree (indicates that the respondent exhibits a low degree of job stress); 1 - Strongly Disagree (indicates that the respondent exhibits a very low degree of job stress).

1.6 Statistical Treatment

This study used both descriptive and inferential statistics. The following statistical tools were employed: Frequency Distribution Count and Percentage Distribution to present the profile of the respondents; Mean to describe the levels of perceptions of the respondents on psychological capital as well as job stress; t-test of Independent Means and One-way Analysis of Variance (ANOVA) to examine if significant differences exist on levels of psychological capital and job stress among the respondents when analyzed according to their profile; Pearson Product Moment Correlation Coefficient or Pearson r to determine if significant relationship exists between psychological capital and job stress among respondents; and Multiple Linear Regression to determine which among the psychological capital factors predict job stress among the respondents.

III. Results and Discussions

Presented in this section are the results of the study.

1.7 Profile of Respondents

Summarized in Table 1 is the profile of the respondents which includes age, sex, civil status, number of dependents, highest educational attainment, length of service, job title, department assigned, gross monthly income, and distance from residence to workplace.

Table 1. Profile of the Respondents

Profile	Frequency	Percentage
Age		
22 - 34	85	46.71
35 - 49	65	35.71
50 - 65	32	17.58
Total	182	100.00
Sex		
Male	58	31.87
Female	124	68.13
Total	182	100.00
Civil Status		
Single	84	46.15
Married	87	47.80
Separated/Divorced	4	2.20
Widowed	7	3.85
Total	182	100.00
Number of Dependents		
None	101	55.49
1 - 3	70	38.46
More than 3	11	6.05
Total	182	100.00
Highest Educational Attainment		
Bachelor's Degree	43	23.63
Board/Bar Passer	92	50.55
Masters/Doctorate Degree	47	25.82
Total	182	100.00
Length of Service		
10 and below	102	56.04
11 - 20	44	24.18
21 and above	36	19.78
Total	182	100.00
Job Title		
Audit Team Member	111	60.99
Audit Team Leader	61	33.52
Regional Supervising Auditor/ Supervising Auditor	10	5.49
Total	182	100.00

Department Assigned		
Corporate Government Sector	51	28.02
Local Government Sector	71	39.01
National Government Sector	60	32.97
Total	182	100.00
Gross Monthly Income (in peso)		
49,999 and below	106	58.24
50,000 to 74,999	63	34.62
75,000 and above	13	7.14
Total	182	100.00
Distance from Residence to Workplace		
Less than 30 minutes	61	33.52
30 minutes to one hour	63	34.61
More than one hour to two hours	40	21.98
More than two hours	18	9.89
Total	182	100.00

1.8 Level of Psychological Capital among Respondents

Presented in Table 2 is the summary of the level of psychological capital factors such as hope, efficacy, resiliency, and optimism among state auditors of the Commission on Audit (COA) in Davao Region, Philippines.

Table 2. Summary of the Level of Psychological Capital among State Auditors of the Commission on Audit (COA) in Davao Region, Philippines

Psychological Capital	Overall Mean	Description	Interpretation
Hope	4.31	Strongly Agree	This indicates that the respondent exhibits a very high degree of hope
Efficacy	4.15	Agree	This indicates that the respondent exhibits a high degree of efficacy
Resiliency	4.21	Strongly Agree	This indicates that the respondent exhibits a very high degree of resiliency
Optimism	4.03	Agree	This indicates that the respondent exhibits a high degree of optimism
Grand Mean	4.18	Agree	This indicates that the respondent exhibits a high degree of psychological capital

The Table shows that Hope was rated highest ($\bar{x}=4.31$) described as “strongly agree”, while Optimism was rated lowest ($\bar{x}=4.03$) described as “agree”. It further shows that the overall psychological capital obtained a mean value of 4.18 which is described as “agree”.

The respondents strongly agreed that they exhibited a very high degree of hope and resiliency. Moreover, they agreed that they exhibited a high degree of efficacy and optimism. Overall, the respondents have high degree of psychological capital. Peterson (2011) [15] stressed that psychological capital provides additive value to employees’ constructive behaviors like organizational citizenship.

1.9 Level of Job Stress among Respondents

The job stress factors include psychological demands, controlled decision latitude, and social constraint in the workplace. Presented in Table 3 is the summary of the level of job stress among state auditors of the Commission on Audit (COA) in Davao Region, Philippines.

It is shown in Table 3 that psychological demands obtained the highest mean value ($\bar{x}=3.10$) which is described as “moderately agree”, while social constraint in the workplace obtained the lowest mean value ($\bar{x}=1.79$) which is described as “strongly disagree”. It further shows that the overall job stress obtained a mean value of 2.30 which is described as “disagree”, denoting a low degree of job stress.

According to Cousins, Mackay, Clarke, Kelly, C., Kelly, P. and McCaig (2004) [10], good working environment is associated with low stress and health risks. Zadegan and Aqa (2018) [16] claimed that personal characteristics such as personality and ways of coping are vital in predicting job conditions that cause stress. Individual differences affect how the environment inflict stress on people.

Table 3. Summary of the Level of Job Stress among State Auditors of the Commission on Audit (COA) in Davao Region, Philippines

Job Stress	Overall Mean	Description	Interpretation
Psychological Demands	3.10	Moderately Agree	This indicates that the respondent exhibits a moderately high degree of psychological demands.
Controlled Decision Latitude	2.03	Disagree	This indicates that the respondent exhibits a low degree of controlled decision latitude.
Social Constraint in the Workplace	1.79	Strongly Disagree	This indicates that the respondent exhibits a very low degree of social constraint in the workplace.
Grand Mean	2.30	Disagree	This indicates that the respondent exhibits a low degree of job stress.

1.10 Test of Difference in the Level of Psychological Capital among Respondents When Analyzed According to Profile

Presented in this section is the test of difference in the level of psychological capital among state auditors of the Commission on Audit (COA) in Davao Region, Philippines when analyzed according to age, sex, civil status, number of dependents, highest educational attainment, length of service, job title, department assigned, gross monthly income, and distance from residence to workplace. Table 4 displays the summary results of the test of difference in the level of psychological capital among state auditors when analyzed according to profile.

Table 4. Summary of the Test of Difference in the Level of Psychological Capital among State Auditors When Analyzed According to Profile

Profile	F/t	Sig.	Decision on H _a
Age	9.051	.000	Accept
Sex	1.300	.195	Reject
Civil Status	3.356	.020	Accept
Number of Dependents	1.775	.173	Reject
Highest Educational Attainment	.576	.563	Reject
Length of Service	6.956	.001	Accept
Job Title	3.977	.020	Accept
Department Assigned	1.240	.292	Reject
Gross Monthly Income	1.472	.232	Reject
Distance from Residence to Workplace	1.668	.176	Reject

Table 4 reveals that the level of psychological capital significantly differs at 0.05 level of significance when analyzed according to age (F=9.051, p-value=0.000<0.05), civil status (F=3.356, p-value=0.020<0.05), length of service (F=6.956, p-value=0.001<0.05), and job title (F=3.997, p-value=0.020<0.05). Therefore, the alternative hypothesis pertaining to these indicators is accepted.

However, it is disclosed that the level of psychological capital does not significantly differ at α=0.05 when grouped according to sex, number of dependents, highest educational attainment, department assigned, gross monthly income, and distance from residence to workplace. Therefore, the alternative hypothesis pertaining to these indicators is rejected.

Harris (2015) [24] mentioned that employees with high psychological capital would bring quality work conditions and outputs, implying more positive outlooks of the organization. They likewise welcome challenges to help them grow.

1.11 Test of Difference in the Level of Job Stress among Respondents When Analyzed According to Profile

Presented in Table 5 is the test of difference in the level of job stress among state auditors of the Commission on Audit (COA) in Davao Region, Philippines when analyzed according to age, sex, civil status, number of dependents, highest educational attainment, length of service, job title, department assigned, gross monthly income, and distance from residence to workplace.

Table 5. Summary of the Test of Difference in the Level of Job Stress among State Auditors When Analyzed According to Profile

Profile	F/t	Sig.	Decision on H _a
Age	5.516	.004	Accept
Sex	-1.563	.122	Reject
Civil Status	1.177	.320	Reject
Number of Dependents	1.361	.369	Reject
Highest Educational Attainment	.689	.504	Reject
Length of Service	1.595	.206	Reject
Job Title	2.043	.133	Reject
Department Assigned	.227	.797	Reject
Gross Monthly Income	.323	.724	Reject
Distance from Residence to Workplace	.706	.550	Reject

It was found that, in general, the level of job stress among state auditors significantly differs at 0.05 level of significance when analyzed according to age (F=5.516, p-value=0.004<0.05). Therefore, the alternative hypothesis pertaining to this indicator is accepted.

However, the level of job stress among state auditors does not significantly differ when grouped according to sex, civil status, number of dependents, highest educational attainment, length of service, job title, department assigned, gross monthly income, and distance from residence to workplace. Therefore, the alternative hypothesis pertaining to these indicators is rejected.

The study conducted by Shelton and Renard (2015) [17] revealed that majority of the employees working in the accounting related firm showed high levels of job stress. Job stress factors are related to some reward choices and satisfaction factors. Significant differences occurred across the demographic variable particularly age. Older employees always showed high job stress level that might be caused by different work assignments and work overload as compared to young and new employees.

Job stress is seen to be personal; its evaluation is based on individual perceptions and their assessment if they can handle physical, environmental, and psychosocial stressors present in their place of work. Thus, job stress among employees does not necessarily matter considering their demographics such as gender, marital status, educational attainment, and even how high or low the salary they received (Görgens-Ekermans & Herbert, 2013) [18].

1.12 Test of Relationship between Psychological Capital and Job Stress among Respondents

Presented in Table 6 is the test of relationship between psychological capital and job stress among state auditors of the Commission on Audit (COA) in Davao Region, Philippines.

Table 6. Result of the Test of Relationship between Psychological Capital and Job Stress among State Auditors of the Commission on Audit (COA) in Davao Region, Philippines

Variables	r-value	Description	p-value	Decision on H _a
Psychological Capital*Job	-0.494	Moderate	0.000	Accept

Stress

Results show that the relationship between psychological capital and job stress is negative, moderate (r -value=-0.494), and significant (p -value=0.000<0.05) at α =0.05. This indicates that the psychological capital significantly influenced job stress among state auditors of the Commission on Audit (COA) in Davao Region, Philippines. Moreover, when the state auditors have high psychological capital, they would have less job stress.

The findings support the study of Singh and Jha (2015) [19] on firm auditors. It was found that high psychological capital is positively correlated to job outcomes and negatively correlated to job stress. Carver and Scheier (2014) [20] argued that psychological capital provides motivational energy to combat pressure in competitive and stressful work conditions.

1.13 Psychological Capital Factors that Predict Job Stress

Displayed in Table 7 is the result of the test to determine the psychological capital factors that predict job stress among state auditors of the Commission on Audit (COA) in Davao Region, Philippines.

Table 7. Result of the Test that Predict Psychological Capital Factors on Job Stress among State Auditors of the Commission on Audit (COA) in Davao Region, Philippines

Psychological Capital Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
Constant	3.68	0.24		15.53	0.000
Hope	-0.11	0.09	-0.14	-1.29	0.198
Efficacy	-0.02	0.08	-0.03	-0.26	0.794
Resiliency	0.01	0.04	0.02	0.24	0.812
Optimism	-0.21	0.07	-0.33	-3.23	0.001

Table 7 reveals that at 0.05 level of significance, optimism (B =-0.21, p -value=0.001<0.05) significantly predicts job stress among state auditors of the Commission on Audit (COA) in Davao Region, Philippines. The sign of statistically significant psychological capital factor (optimism) is negative, indicating a direct negative relationship with the dependent variable (job stress). This means that when state auditors have high level of optimism, they have low level of job stress. For instance, as the state auditors of the Commission on Audit possess a high positive attribution about their current condition as well as their future, they are more capable of managing job stress specifically in terms of psychological demands, controlled decision latitude, and social constraint in the workplace.

According to Bryant and Cvenegros (2004) as cited in Bailey, Frisch, Eng, and Synder (2017) [21], optimistic auditors are those who can cope with stressors due to their ability to have a different perspective of unfavorable situations, thus they would experience less stress and achieve greater positive effect in the workplace. The study of Jobin, Wrosch, and Scheier (2014) as cited in Mishra (2016) [22] found that individuals who have high optimism scores reported less stress. Auditors with high optimism are positively linked with healthy work ethics exhibiting commitment to the organization, satisfaction with their job, and happiness with their work; these things eventually result in greater work output.

IV. Conclusion

The results of the study bring the following conclusions:

There is a significant difference in the level of psychological capital when analyzed according to age, civil status, length of service, and job title. There is no significant difference in the level psychological capital when grouped according to sex, number of dependents, highest educational attainment, department assigned, gross monthly income, and distance from residence to workplace.

There is a significant difference in the level of job stress when analyzed according to age. There is no significant difference in the level of job stress among respondents when grouped according to sex, civil status, number of dependents, highest educational attainment, length of service, job title, department assigned, gross monthly income, and distance from residence to workplace.

There is a significant negative relationship between psychological capital and job stress.

The psychological capital factor that significantly influence job stress among state auditors is optimism.

In light of the findings and conclusions of the study, the researches offer the following recommendations:

Social services may be given to the state auditors to keep their level of psychological capital high in consideration of their demographic profile.

Good practices may be sustained by the Commission on Audit to keep the level of job stress low among state auditors in consideration of their demographic profile.

Optimistic behavior may be considered as one of the hiring qualifications for state auditor applicants.

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