# Relationship between Positive Variables and Stress

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## **Abstract**

Stress is one of the most important social factors which are effective in disturbing psychological balance. Regarding the length of time the people spend in working environment, this issue is of high importance in the field of employees. One the other hand, during past decades, there has been much attention paid to psychological features and positive psychological processes in positive organizational research in the studies; specifically, it is well known that these constructs are effective in the human's welfare, optimism, vitality, and self-mastery are some cases in point. The effectiveness of the above-mentioned variables on the stress has been investigated in the present study. The study sample includes 110 employees working at Isfahan industrial companies. The sample has been selected using stratified random sampling method appropriate for the sample size. The study instruments include Eliot Job Stress Questionnaire, Scheier and Carver optimism questionnaire, Nix, Ryan, Manly & Deci vitality questionnaire and Pearlin and Schoolers Self-mastery. The data analysis method adopted was stepwise regression. In regression analysis, first, optimism, second, vitality, then self-mastery were recognized as perceived stress predictors. The relationships between positive variables and stress have been reported to be opposite. Based on the results analyzed, the three above-mentioned variables had the capability to explain 36% of stress variance. The results of the study imply that working on positive variables to make them act effectively on decreasing stress is of high value in the organizations.

**Keywords:** Stress, Positive variables, Optimism, Vitality, Self-mastery

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## Introduction

Job stress is taken as one of the most important and serious issues associated with the health (Lu, Kao, Chang, Wu & Cooper, 2008). In the present era, job stress is considered to be the commonest title in applied psychology studies and encompasses a wide range of fields from social sciences to medication. Job stress is the inability to cope with job pressure, the reason whereof is the weak proportionate between fast technology developments, ever growing powers and job condition (Holmlund-Rytkonen & Strandvik, 2005).

Fast technological advancements, ever-growing competitions, demand for promoted efficiency, ambiguity in the future, abrupt outgrowth of information are all among the factors which are effective in creating enormous sources of stress in working environment (Jahanzeb, 2010). Surely, this stress is followed by different negative outcomes at working space and personal space as well (Oginska-Bulik, 2005). Taking the above facts into account, having awareness in these fields is of high importance (Bhatti, Hashimi, Raza, Shaikh and Shafiq, 2011). General performance and many outcomes such as job satisfaction are under the effect of stress, too (Ahsan, Abdullah, Fie and Alam, 2009; Usman, Ahmed, Ahmed and Akbar.2011; Yaacob and Long, 2015).

On the other hand, other studies show that there has been no time wherein positive psychology issues such as mental health have not been attended to (Wright and Cropanzano, 2004). The extension and the importance of positive psychology are very great (Richardson & Guignon, 2008). The importance of positive psychology has been put into a range from human's age life-time from childhood to adulthood and in different working places (Mongrain and Tracy Anselmo, 2012). For instance, the concepts associated with positive psychology such as vitality, optimism, self-mastery have continuously been investigated in various studies (for example, Deng, Guyer and Ware, 2015; optimism: Wrosch, Jobin & Scheier, 2016; self-mastery: Dong, Zhang and Simon, 2014).

Bostic, Rubio and Hood (2000) believe that vitality is an internal state of experiencing full energy. Vitality has a close relationship with the individual's mental health (Reinhoudt, 2004; Kashdan, 2002). Positive experiences promote vitality and retrieve human's lost powers (Muraven, Gagne & Rosman, 2008).

Optimism is a personal attitude regarding social future or the future of everything centered around individual's profit (Peterson, 2000) or is a desirable expectation developed about the future (Carver, Scheier and Segerstrom, 2010).

Self-mastery includes the person's control on his/her life (Pearlin & Pioli, 2003). Self-mastery is a mental construct which concentrates on the future and takes one's self as the locus of control and puts huge emphasis on stress management (Roepke & Grant, 2011). High levels of self-mastery are concomitant with health (Ward, 2013).

According to what was pointed out, taking into consideration the importance of study on job stress (Ivancevich & Ganster, 2014) and the importance of attending to positive psychology in the human's welfare and health (Wong, 2011), the present study has addressed the investigation of the relationship between stress and positive variables. Positive variables have been vitality, optimism and self-mastery in the present study.

### Method

The present research design is relational. The research population of the study has been the employees working in one of the industrial companies in Isfahan. The study sample includes 110 employees who were selected via stratified random sampling method appropriate for the size. Adequacy of the sample size was obtained was taking the feature variance and the statistical power measured was 0.8. The research instruments were the following questionnaires:

Vitality questionnaire: Ryan & Deci (2000) and Ryan and Frederick (1997), introduced vitality scale questionnaire to assess vitality. This scale includes 7 phrases and is a seven-point scale (Nix, Ryan, Manly and Deci, 1999). The instrument reliability, in the study, was measured 0.75.

The scale of self-mastery: it was used to assess personal perception of control by Perlin and Schooler self-mastery scale (1978) which was translated by Oreyzi (2004). This scale measures the degrees which are consistent with perceived personal control over life outcomes. The respondents should respond to a seven-question four-alternative scale with points from (1) strongly disagree to (4) strongly agree. The degree of reliability, in the study, was measured to be 0.78 for this scale.

Optimism questionnaire: in order to assess the respondents' optimism, the life orientation questionnaire, designed by Scheier and Carver (1985), was applied. The reliability of the instrument was measured to be 0.77 in the present study.

Job Stress Questionnaire: this questionnaire has been designed by Elliott, Chartrand, and Harkins in 1994 and it includes 20 items. Its scoring was from 1 to 4. The reliability of this instrument was measured to be 0.78 in the present study.

Administration method: after coordination of the researcher and management, the researcher came in the place and after offering instruction, the data collection of the questionnaire was measured with the observance of moral principles.

## **Results**

At the first stage the mean, standard deviation, variance and correlation coefficient matrix of positive variables with the stress have been rendered.

According to table 1, in the present study the highest mean, standard deviation and variance have been estimate as related to stress. According to table of job stress has significant positive relationship with the variables of vitality, optimism and self-mastery (p<0.01) that the highest correlation coefficient is for stress and optimism (r=0.53).

Table 1. Descriptive statistic and correlation coefficient matric of research variables

Variable	Mean	Standard variation	Variance	Minimum	Maximum	Stress	Vitality	Optimism	Self mastering
Stress	36.89	6.50	42.30	20	63	1			
Vitalit y	16.93	20.88	8.29	18	21	-0.43**	1		
Optim ism	22.28	2.90	8.44	14	29	-0.53**	0.43**	1	
Self master ing	20.59	3.42	12.69	13	28	-0.47**	0.32**	0.61**	1
**P<0/01									

In table 2, the report of the results of stepwise regression analysis has been given.

Table2. Statistical index of stepwise regression in predicted job stress

Number of step	Variable	Non standard coeficient	Constant	)βBeta(	T test	Significant level
First step	Optimism	-1.18	63.27	-0.53	6.48	0.001<
Second step	Optimism	-0.94		-0.42	-4.8	0.001<
	Vitality	-0.56	67.39	-0.25	2.82	0.006
	Optimism	-0.66		-0.30	2.85	0.005
Third step	Vitality	-0.53	69.03	-0.23	- 2.71	0.008
	Self mastering	-0.41		-0.22	2.18	0.03

According to table 2, regression equivalent is reported as follows:

Regression equivalent for job stress based on standardized coefficient

Predicted job stress= (-0.22) self-mastering + (-0.23) vitality + (-0.30)optimism

Regression equivalent for job stress based on non-standardized coefficient

Predicted job stress= (-0.41) self-mastering + (-0.53) vitality + (-0.66)optimism+69.03

According to table 3 the report of multiple correlation coefficient of predictive variables (optimism, vitality and self-mastery) with the criterion (job stress) has been measured.

According to table 3, multiple correlation coefficient of predictive variables of optimism, vitality and self-mastery with the criterion variable (job stress) has been reported 0.36 (P<0.05).

Table3. corelation coeficient of significant predicted variables(optimiem, vitality and self mastering) with criterion variable(job stress)

Steps	Variables	Multiple corelation coeficient	Eta square	R <sup>2</sup> change	Standard error	Significant level
First step	Optimism	0.53	0.28	0.28	5.54	< 0.001
Second step	Optimism and vitality	0.57	0.33	0.05	5.37	0.006
Third	Optimism,	0.60	0.36	0.03	5.28	< 0.05

step vitality and self mastering

#### **Discussion and Conclusion**

Negative outcomes of job stress are undeniable in the present era (Eginska-Blake, 2005) and according to it, job stress is of high value (Chahanzeb, 2010). Taking this fact into account, decreasing stress in the field of health has received much attention (Lu, et.al, 2008). Among the issues put forward in the field of health, it is positive psychology which attempts to improve human's welfare and health through attending to positive constructs (Richardson and Goingnon, 2008). Therefore, the present study has investigated the relationship between earlier-mentioned positive variables with stress through taking three variables of positive psychology. At first, correlation coefficient of mentioned variables with job stress has been reported. These relationships were significant and opposite (1). It is followed by reporting step-wise regression analysis (table 2).

According to stepwise regression analysis in the present study, the variables of optimism, vitality and then, at the third step, self-mastery were able to predict job stress, respectively. Taking multiple regression coefficients into consideration, the above-mentioned variables have 36% capability to explain the variance of job stress variable (table 3).

The greatest correlation coefficient and explanation capability is for optimism variable (table 2). This relationship is significant in opposite form (table 1); that is, increasing optimism is concomitant with decreasing job stress and this relationship is reciprocal. According to it, decreasing optimism is concomitant with increasing job stress too. Probable explanation for this issue is that the optimism is a kind of positive expectation toward the self (Karor, et al, 2010); this positive expectation is the creator of a suitable horizon in the person's life, it is axiomatic that an optimistic person is more hopeful in his/her life and in trying to achieve the best goals in the life.

Considering the fact that working life is the major part of the individual's life, the optimistic person experiences less stress in the working environment by the expectations he/she has from him/herself; since his/her ideal in working life has been determined clearly and it is achievable.

The second predictor of job stress in the present study is vitality (table 2). Vitality has had negative significant relationship with job stress (table 1); that is, in a reciprocal relationship, decreasing one leads to decreasing the other. Vitality is a kind of internal experience from the energy (Bostick, 2003); such a person feels cheerful and happy. According to it, it is considered energetic and stimulator. A person who has vitality is continuously inclined towards spending energy in determined pathways of the purposes for the self. Little stress on the part of such person is due to his/her being dynamic and energetic in the environment that continuously spends energy in order to get to the purposes.

The third predictor of job stress is self-mastery (table 2). Self-mastery means coping with stress (Royk and Grant, 2011). According to the findings obtained out of the present study, there is a kind of opposite relationship between self-mastery and job stress (table 1). There is a probable explanation in this issue that the people with high self-mastery have appropriate techniques to cope with stress. These people have a sense of high control in the environment (Perlin and Schooler, 2003). The people with high self-mastery enjoy high health (Ward, 2013). Probably, the people owning self-mastery have the capability to manage the condition due to mental sense of situation control and based on that, they are able to make proper adaptations and make sound decisions in ambiguous and difficult working conditions.

The present study proposes the importance of investigating and attending to positive psychological constructs in decreasing stress. Many of positive psychological constructs such as optimism, vitality and self-mastery are among factors which are important in coping with stress and decreasing stress level. It is undeniable that the objective of positive psychology is the human's welfare and health and steadily seeks for the human's life improvement. Undoubtedly, the human's life will move toward the health if it is enriched with positive emotion and energy in all life aspects like the job wherein the person spends very much of his/her life time. These constructs are probably followed by a kind of positive emotion, hope and energy which is highly helpful in coping with the problems.

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