Research Article

The Role of Stress Management in Self-Efficacy; a Case Study in Tehran based Science & Research Department of Islamic Azad University Natural Resources & Agricultural Faculty Students

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A R T I C L E   I N F O

A B S T R A C T

Objective: This study is applied of descriptive correlative type run as field study using Billings and Moos (1981) standard methods questionnaires for stress coping and self-efficacy ideas of Sherer et al (1981). **Methods:** In this research, the census sampling has been done to select the students from Tehran based Science and Research Department of Islamic Azad University Natural Resources and Agricultural Faculty. The study statistical community consists of all graduate students (n=85) in extension and education of agricultural training and rural development fields in Tehran based Science and Research Department of Islamic Azad University Natural Resources and Agricultural Faculty. Regarding the student community being limited in the area of master level extension and education of agricultural training and rural development, all of them have been sampled by census method, out of whom 76 have been accessible. Data statistical analysis performed using computer software SPSS$_{17}$. **Results:** The results derived from the independent variables influencing the dependent ones indicate a meaningful positive relationship between problem solving focus and motion focus and self-efficacy. The results extracted from the collective effect of the independent variables on the dependent one by multi regression imply the positive effect of emotion focus on the self-efficacy of students of Tehran Science and Research Department of Islamic Azad University Natural Resources and Agricultural Faculty.

1.INTRODUCTION

Stress is something inevitable and necessary in life (Kittrell Chitty, 2005).A pervasive phenomenon and general experience for man essential for survival and growth, influencing everybody regardless of age, gender, race, economic conditions or education (Potter& Perry, 2003).Although some stresses are natural and binding , in case of being severe ,continuous or recurrent , the person isn't able to cope with it effectively or when supportive resources are few, stress is considered a negative phenomenon resulting in physical diseases and psychological disorders (Laudo, 2001).When a stressor affects human life , the emotional state and physiological thinking lose its balanced and normal level and cognitive activity gets vulnerable and behavioral complications are recalled as susceptible, anxiety and depression (Shirbim and Shafi-Abadi, 2008).In addition to affecting the individual's personal life and creating a kind of disorder in them, stress and mental pressure overshadows the individuals' efficiency and efficacy at workplace and education setting (Ratios, 2007).Stress exerts many effects on the students' function and activities, thus under the pressure of stress ,they conduct some

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behaviors and actions directly reflecting their work efficiency (Yousefian, 2007).The universities and higher education institutions are always considered as the most important center of thinking and creating knowledge for society that plays a fundamental role in directing thinking ,ideological ,cultural and political movements(Zeraat et al, 2004). Getting into university creates a major change in personal, social and family life. In this period, the individual faces many changes in social and human relations and many new expectations and roles .Being under such conditions has usually been accompanied with pressure and worry affecting the individual's performance and efficiency (Shirbim and Shafiabadi, 2008). For many students, not being familiar with university campus when getting in, being far from family, not interested in their major, incompatibility with others in life and insufficient welfare and economic facilities are of the conditions resulting in some nuisances and mental problems and performance drop and their mental health will be affected(Saki and Keykhani, 2002).

According to White et al, (2000), when people are exposed to stress, they need to be equipped with the necessary coping skills so that they could cope with their life needs and challenges in a better manner .One of the variables drawing the researchers' attention   is the concept as the perceived self-efficacy (Zeraat et al, 2004). Self-efficacy is the basic part of cognitive-social theory referring to the individual's beliefs and judgments about their capabilities in doing their tasks and responsibilities. Self-efficacy refers to the individual's beliefs about their capabilities to carry out the development performance planned levels and controlling the events influencing their life significantly (Ronaghi, 2010). Self-efficacy related beliefs affect body physiological responses to stress such as the immune system of body (Bandura, 1977). In other words, self-efficacy feeling is associated with people's stress .The individuals' self-efficacy determines their motivation level via controlling their efforts and the time they resist against obstacles .When coping with hardships, the people suspicious of their potentials reduce their efforts and immediately resort to lower solution. In contrast, those with strong self-esteem about their capabilities to overcome the obstacles make more efforts (Robins and Timothy, 2011).

The studies conducted on self-efficacy to perceive stress suggested that the people with high perceived self-efficacy experience lower stress (Zeraat et al, 2004).Also those with higher self-efficacy expectation (Maciejewski et al, 2000) have higher confidence, apply further commitment, challenge and control, are humorous and enjoy higher social support and so called they get perturbed later and are stronger against perturbation (Godfrey, 2004).As Bandura (1996) believes the previous knowledge, skills and achievements aren't appropriate predictors of the individuals' future performance ,rather man's belief about their potentials in doing them affect their performance .In fact, self-efficacy underlines the feeling of competence in controlling their environment .

The results of the studies by Cheng et al. show that high self-efficacy modifies stress-mental health relationship (Cheng-qin et al, 2002).

Hardin et al. (2002) in a study reported that the psychological measures led to increasing the individuals' perception of self-efficacy stress and social support. Keogh et al. (2005) in their research analyzing the effectiveness of stress management in the students' educational attainment and mental health suggested that this action increases both the educational performance and mental health of the students.

Regarding the point that in every university, human force, that is, the students are taken as the key capital and since Tehran Science and Research University is one of the country prestigious universities, thus to identify stress management methods (stress coping and control) and its role and relationship with the students' beliefs and capabilities in doing their tasks is very critical. That how much feeling incapable in stressful situations can reduce self-efficacy or how much stress control can raise the students' self-efficacy and make them very successful is very significant. In this study, with respect to the special characteristics of the period of being student, the role of stress management in self-efficacy has been studied as one of the coping methods for the students' mental health.

1.1. Research Objectives

The general objective of this study is to analyze the role of stress management in the self-efficacy of the students of Tehran based Science & Research Department of Islamic Azad University Natural Resources & Agricultural Faculty.

Consistent with this study general objective, the specific ones are as the following:

 1. Studying the problem solving focus level influencing the self-efficacy of the students of Tehran based Science & Research Department of Islamic Azad University Natural Resources & Agricultural Faculty;

2. Studying emotion focus level influencing the self-efficacy of the students of Tehran based Science & Research Department of Islamic Azad University Natural Resources & Agricultural Faculty;

3. Studying the personal traits of the students of Tehran based Science & Research Department of Islamic Azad University Natural Resources & Agricultural Faculty.

2. MATERIAL AND METHOD

Because the study aims to analyze stress management role in the self-efficacy of the students from Tehran based Science and Research Department of Islamic Azad University Natural Resources and Agricultural Faculty, the study is descriptive-correlative .In the current research, Billings and Moos (1981) standard methods questionnaires for stress coping and self-efficacy ideas of Sherer et al. (1982) have been used to collect data. Billings and Moos (1981) coping questionnaire has been developed to study the way the individuals respond to stressful situations and measures two coping styles as problem-oriented and emotion-oriented .It includes 19 questions covering problem focus and emotion focus .The problem focus area includes 11 options and emotion focus covers 8 options measured by Likert scale (Ghazanfari and Ghadampour, 2004).The questionnaire's reliability coefficient has been reported as 0.78 by halving method (Bakhshipour Rood sari et al, 2004) .Self-efficacy beliefs questionnaire by Sherer et al. (1981) has been built to measure global self-efficacy beliefs encompassing 17 options .For each item of this scale , 5 answers have been suggested scored from 1-5.These 5 answers are: absolutely disagree , disagree ,indifferent, agree and absolutely agree. Higher scores indicate stronger and lower ones imply poorer self-efficacy and it is applicable with no age limitation (Karami et al, 2012).

Sherer (1982) has mentioned the estimated validity as 0.76 for global self-efficacy by α-Cronbach.

The study statistical community includes all graduate students (n=85) in extension and education of agricultural training and rural development fields in Tehran based Science and Research Department of Islamic Azad University Natural Resources and Agricultural Faculty, all have been sampled via census .Out of this number , 76 have been accessible .SPSS17 has been applied to analyze the collected data.

3. RESULTS

3.1.Students Personal Traits Analysis
The findings imply that 55.3 percent of the students are men and 44.7 percent are women. 44.7 percent of the students are under 30 years old, 46.1 percent between30-40 and 9.2 percent are over 41 years old. 73.7 percent are studying extension and education of agricultural training and 26.3 percent are studying rural development fields. 63.2 percent of students are employed while 36.8 percent are jobless.

3.2.Rating Students' Perspective based on Self-Efficacy
Rating the items based on the variations change shows that in the students' mind, focusing seriously on tasks, failure leads to efforts and self-reliance with variations coefficients 0.250, 0.272 and 0.289, respectively about self-efficacy rated 1st to 3rd (table 1).

Table 1:
Rating of Students' Perspective based on Self-Efficacy

Rating	Items	Mean	SD	Coefficient of Variations
1	Seriously focused on tasks	3.72	0.93	0.250
2	Failure results in efforts	3.56	0.97	0.272
3	Self-reliance	3.63	1.05	0.289
4	Continuing to redo the task	3.71	1.12	0.301
5	Persistence to complete the tasks	3.30	1.18	0.357
6	Giving up due to being unsuccessful	3.09	1.17	0.378
7	Not able to solve unexpected problems	3.09	1.17	0.378
8	Easily surrendering	3.18	1.27	0.399
9	Not striving for complicated tasks	3.03	1.23	0.405
10	Avoiding to learn difficult issues	3.02	1.24	0.410
11	Rarely achieving important goals	2.97	1.24	0.417
12	Lacking confidence in their own capabilities	3.07	1.29	0.420
13	Evading to face problems	2.86	1.21	0.423
14	Lacking capability to cope with life nuisances	3.02	1.28	0.423
15	Lacking confidence in planning	2.88	1.28	0.444
16	Giving up tasks before completion	2.86	1.29	0.451
17	Not being able to do some task	2.80	1.27	0.453

3.3.Rating Students' perspective based on Stress Coping

Rating the items based on the variations coefficient implies that from the students' view, using objectivity ,the positive measures for solving problems and praying for guiding and empowering themselves with variations coefficient as 0.258, 0.262 and0.275 about stress coping have been rated first to third (table 2).

Table 2:
Rating Students' perspective based on Stress Coping

Rating	Items	Mean	SD	Coefficient of Variations
1	Using objectivity	2.82	0.73	0.258
2	Positive measures for problem solving	2.90	0.76	0.262
3	Praying for guiding and empowering oneself	3.08	0.85	0.275
4	Knowing more about success	3.06	0.86	0.281
5	Consulting with spouse or relatives about their situation	3.03	0.87	0.287
6	Getting prepared for worse conditions	2.88	0.85	0.295
7	Consulting with friends about one's situation	2.88	0.86	0.298
8	Requiring help and practice to solve problem	2.64	0.79	0.299
9	Proceeding to achieve objectives	3.04	0.93	0.305
10	Being optimistic about everything	2.86	0.88	0.307
11	Possessing more than one solution for solving problem	2.97	0.93	0.313
12	Keeping oneself busy to forget things	2.61	0.84	0.321

13	Being in similar situations	2.78	0.91	0.327
14	Consulting with experts ,lawyers and psychologists	2.77	0.90	0.324
15	To retaliate	2.61	0.92	0.352
16	To bottle down	2.80	0.99	0.353
17	Not being worried	2.69	1.05	0.390
18	Indulging oneself in eating to lower inner stress	2.40	1.07	0.445
19	Smoking to reduce inner stress	2.13	1.12	0.525

Assessment scale: 1=Never; 2=Sometimes; 3=Often; 4=Always.

Based on this study derived findings, there is a meaningful positive relationship between the variables of stress management (in general state) and problem solving focus and emotion focus with self-efficacy at 99% level(table 3).

Table 3:

Correlation between agricultural students' stress management and self-efficacy

Row	1st variables	2nd variable	r	p
1	Stress management (general state)		0.520**	0.000
2	Problem solving focus	Self-efficacy	0.458**	0.000
3	Emotion focus		0.544**	0.000

In order to explain self-efficacy variance variations, the meaningful variables enter the regression analysis step by step. The analysis results are included in tables (4) and (5).

According to tables (4), emotion focus variable enters the equation step by step. In the first and the only step, when the variable of emotion focus entered the regression equation, it could explain the dependent variable variance variations 47.3% .Generally speaking, as this variable enters, the modified determination coefficient has been obtained R^2=0.473 .This coefficient (R^2) suggests that 47.3% of self-efficacy variance variations are related to this variable and the rest (52.7%) depends on other factors. The significance of regression has been estimated by F being meaningful at 99% level (Sig=0.000).

Table 4:

Different steps of independent variables entering the regression analysis

Steps	Variable	R	R square	Adj. R square	Std
1	Emotion focus (X_r)	0.693	0.481	0.473	8.64

Table 5:

variables coefficients entering the regression equation

Variable	B	Standard error	Beta	T	Sig.
Emotion focus (X_r)	1.839	0.229	0.693	8.047	0.000
Constant	17.065	4.415	-	-	-

Thus regression line equation based on B and β is explained as the following.
Based on B: $Y=17.065 +1.839 X_3$

4. DISCUSSION AND CONCLUSION

The present study results suggest that emotion focus can have the highest effect in self-efficacy. Out of the studies conducted, we can mention the one by Ronaghi (2010). According to the results extracted from Ronaghi's research (2010), the total score from stress management is 2.88 denoting high stress management level in the country based Aviation Industry College staff .Also the total score obtained from two variables called the staff stress management and self-efficacy revealed a meaningful positive relationship between them consistent with those achieved by Ronaghi (2010).

The data indicate that there is a meaningful positive relationship between problem solving focus and emotion focus and self-efficacy .This result is in line with those gained by Hardin et al. (2002) and Change-qin et al. (2005).

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