SURVEYING RELATIONSHIP BETWEEN FACTORS OF CHALLENGE STRESSORS AND SELF-EFFICACY AT ISLAMIC AZAD UNIVERSITY

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Abstract
The main purpose of this study is “surveying relationship between factors of challenge stressors (Task Complexity, Time Pressure and Responsibility) and self-efficacy at Islamic Azad University branches in Ardabil province.” The population of this study are faculty members of Islamic Azad University branches in Ardabil province. We determined the amount of the sample size with the used of Cochran sampling method which the statistical sample is 203, which have been selected through the stratified random sampling method. To gathering of data, we used both challenge stressors and self-efficacy questionnaire according to Colquitt, Lepine, Wesson, (2010). Questionnaires reliability was estimated by calculating Cronbach’s Alpha that was 0.862 for challenge stressors and 0.746 for self-efficacy. In order to analyze the data resulted from collected questionnaires deductive and descriptive statistical methods are used, and to display some statistical data we used column diagram and in deductive level to test the hypothesis of the research we used Pearson correlation. Findings show that there is significant relationship between factor of challenge stressors (Task Complexity, Time Pressure and Responsibility) and self-efficacy at Ardabil branches of Islamic Azad University.

Keywords: self-efficacy, Task Complexity, Time Pressure and Responsibility, challenge stressors

INTRODUCTION
Stress is the way human beings react both physically and mentally to changes, events, and situations in their lives. People experience stress in different ways and for different reasons. The reaction is based on your perception of an event or situation. If you view a situation negatively, you will likely feel distressed—overwhelmed, oppressed, or out of control. Distress is the more familiar form of stress. The other form, eustress, results from a “positive” view of an event or situation, which is why it is also called “good stress.”

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Eustress helps you rise to a challenge and can be an antidote to boredom because it engages focused energy. That energy can easily turn to distress, however, if something causes you to view the situation as unmanageable or out of control. Many people regard public speaking or airplane flights as very stressful—causing physical reactions such as an increased heart rate and a loss of appetite—while others look forward to the event. It’s often a question of perception: A positive stressor for one person can be a negative stressor for another (Ayala, 2002).

Stress can come from any situation or thought that makes you feel frustrated, angry, or anxious. Everyone sees situations differently and has different coping skills. For this reason, no two people will respond exactly the same way to a given situation. Situations that are considered stress provoking are known as stressors. Stress is not always a bad thing. Stress is simply the body’s response to changes that create taxing demands.

Many professionals suggest that there is a difference between what we perceive as positive stress, and distress, which refers to negative stress. In daily life, we often use the term “stress” to describe negative situations. This leads many people to believe that all stress is bad for you, which is not true.

Positive stress has the following characteristics:

- Motivates, focuses energy
- Is short-term
- Is perceived as within our coping abilities
- Feels exciting
- Improves performance

In contrast, negative stress has the following characteristics:

- Causes anxiety or concern
- Can be short or long-term
- Is perceived as outside of our coping abilities
- Feels unpleasant
- Decreases performance

Can lead to mental and physical problems (Greenberger and Padeshy, 1995).

Selye (1976, 1982), the originator of the distinction between "eustress" (good stress) and distress (bad stress), did not conceptualize stress this way. Rather, Selye suggested that distinctions among types of stress should be based on the type of demand (i.e., the type of Stressor), not on the level of demand. Moreover, Selye focused his attention on the physiological effects of distress. He never examined relationships with job performance, and he discussed eustress briefly in his work to account for stressors that appeared to be healthful and to cause positive emotions. Finally, although the possibility that there is an inverted U-shaped relationship between stress and performance is intuitively appealing, tests have not been supportive (Westman & Eden, 1996). Although the good stress/ bad stress idea remains popular today, theories that account for the distinction have not been developed, and only recently have scholars begun to consider relationships between good stress and work criteria.

One such study, Cavanaugh, Boswell, Roe ling, and Boudreau (2000) found two factors underlying scores on items from several popular measures of stress. One factor included demands such as high workload, time pressure, job scope, and high responsibility. This factor was labeled "challenge stressors" because it included stressful demands viewed by managers as obstacles to be overcome in order to learn and achieve. The other factor included demands such as organizational politics, red tape, role ambiguity, and concerns about job security. This factor was labeled "hindrance stressors" because it included stressful demands viewed by managers as unnecessarily thwarting personal growth and goal attainment. Importantly, regression analysis
results indicated that whereas challenge stressors were positively associated with job satisfaction and negatively associated with job search, hindrance stressors were negatively associated with job satisfaction and positively associated with job search. Boswell, Olson-Buchanan, and LePine (2004) replicated the underlying two-dimensional factor structure of the stressor items in the context of lower-level employees, and they also found that the two types of stressors had differing relationships with several retention criteria. Although this research demonstrated that people distinguish challenge stressors from hindrance stressors and that the two types of stressors have differing relationships with important occupational criteria, this research did not provide a theoretical explanation for the dimensions or examine relationships with performance.

Lazarus and Folkman (1984) posited that people appraise stressful situations as either potentially threatening or potentially promoting mastery, personal growth, or future gains. This distinction among stressors is similar to the distinction that Cavanaugh and colleagues (2000) made, albeit Lazarus and Folkman used the labels "threats" and "challenges." The outcome of this initial appraisal process influences emotions, which in turn influence how a person copes with stressors. Challenge stressors, because they are appraised as having the potential to promote personal gain or growth, trigger positive emotions and an active or problem-solving style of coping (e.g., increasing effort). Threatening or hindering stressors, because they are appraised as having the potential to harm personal growth or gain, trigger negative emotions and a passive or emotional style of coping (e.g., withdrawing from the situation, ration).

Stress and self-efficacy are closely related concepts. In Lazarus’ cognitive model of stress (Lazarus and Folkman, 1984), personal beliefs such as self-efficacy are crucial in evaluating demands from the environment. Each external demand is evaluated as a “threat” or a “challenge,” and persons with high self-efficacy beliefs are more likely to evaluate the demands as a challenge (Chemers, Hu, and Garcia, 2001). That is, the extent to which a person feels confident about his or her competence to handle a given situation affects whether a given task is perceived as stressful or threatening, rather than as a challenge. When a task is appraised as a challenge, one is more likely to select an effective coping strategy and to persist at managing the task. Self-efficacy thus affects the perception of external demands and mediates the relation between external stressors and psychological stress (Bandura, 1995). Using a path analytic model, Chemers et al (2001) found that the effect of academic self-efficacy on stress was completely mediated by evaluations of demands as threat or challenge. In the other direction, physiological arousal states associated with stress and anxiety offer information affecting self-efficacy judgments (Solberg et al., 1998). Similarly, Hackett et al. (1992) suggested that stress and anxiety may depress self-efficacy judgments of students.

Self-efficacy is the extent or strength of one’s belief in one’s own ability to complete tasks and reach goals (Ormrod, 2006). Psychologists have studied self-efficacy from several perspectives, noting various paths in the development of self-efficacy; the dynamics of self-efficacy, and lack thereof, in many different settings; interactions between self-efficacy and self-concept; and habits of attribution that contribute to, or detract from, self-efficacy. This can be seen as the ability to persist and a person's ability to succeed with a task. As an example, self-efficacy directly relates to how long someone will stick to a workout regimen or a diet. High and low self-efficacy determine whether or not someone will choose to take on a challenging task or "write it off" as impossible.
Elf-efficacy is defined as a self-evaluation of one’s competence to successfully execute a course of action necessary to reach desired outcomes (Bandura, 1986). It is a multidimensional construct that varies according to the domain of demands (Zimmerman, 2000), and therefore it must be evaluated at a level that is specific to the outcome domain (Pajares, 1996). Self-efficacy affects every area of human endeavor. By determining the beliefs a person holds regarding his or her power to affect situations, it strongly influences both the power a person actually has to face challenges competently and the choices a person is most likely to make. These effects are particularly apparent, and compelling, with regard to behaviors affecting health (Luszczynska and Schwarzer, 2005). Judge, Erez, Bono, Thoresen (2002) argued the concepts of locus of control, neuroticism, generalized self-efficacy (which differs from Bandura’s theory of self-efficacy) and self-esteem measured the same, single factor and demonstrated them to be related concepts.

**METHODOLOGY**

The main purpose of this study is “surveying relationship between factors of challenge stressors (Task Complexity, Time Pressure and Responsibility) and self-efficacy at Islamic Azad University branches in Ardabil province.”

The population of this study are faculty members of Islamic Azad University branches in Ardabil province. We determined the amount of the sample size with the used of Cochran sampling method which the statistical sample is 203, which have been selected through the stratified random sampling method. Table 1 shows the characteristic and classes of Islamic Azad University in Ardabil.

**Table 1: The population and sample characteristic**

<table>
<thead>
<tr>
<th>Islamic Azad University branches</th>
<th>n</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ardabil</td>
<td>114</td>
<td>240</td>
<td>56</td>
</tr>
<tr>
<td>Khalkhal</td>
<td>24</td>
<td>50</td>
<td>12</td>
</tr>
<tr>
<td>Parsabad</td>
<td>28</td>
<td>58</td>
<td>14</td>
</tr>
<tr>
<td>Meshkinshahr</td>
<td>16</td>
<td>34</td>
<td>8</td>
</tr>
<tr>
<td>Germi</td>
<td>14</td>
<td>32</td>
<td>7</td>
</tr>
<tr>
<td>Bilesevar</td>
<td>7</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>203</td>
<td>409</td>
<td>100</td>
</tr>
</tbody>
</table>

To gathering of data, we used both challenge stressors and self-efficacy questionnaire according to Colquitt, Lepine, Wesson, (2010). Questionnaires reliability was estimated by calculating Cronbach’s Alpha that was 0.862 for challenge stressors and 0.746 for self-efficacy.

In order to analyze the data resulted from collected questionnaires deductive and descriptive statistical methods are used, and to display some statistical data we used column diagram and in deductive level to test the hypothesis of the research we used Pearson correlation.
RESULTS
In this paper we have three hypotheses. The statistical way of analysis of hypotheses is two ways, \( H_1 \) is acceptance of hypothesis and \( H_0 \) is rejecting of hypothesis. In other words, it means that \( H_1 \) has positive meaning and \( H_0 \) has negative meaning.

**Hypothesis 1:** There is a significant relationship between time pressure factor of challenge stressors and self-efficacy at Islamic Azad University branches in Ardabil province.

\( H_1 \): There is relationship between Time Pressure factor of challenge stressors and self-efficacy at Islamic Azad University branches in Ardabil province.

\( H_0 \): There is not significant relationship between time pressure factor of challenge stressors and self-efficacy at Islamic Azad University branches in Ardabil province.

Correlation analysis has been done in order to determine the relationship between time pressure factor of challenge stressors as independent variable and self-efficacy as dependent variable. The correlation analysis result between these variables is shown in table 2.

Table 2- the relationship between time pressure factor of challenge stressors and self-efficacy

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>Correlation experience</th>
<th>Significance level</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>time pressure factor of challenge stressors</td>
<td>Self-Efficacy</td>
<td>0.115</td>
<td>0.048</td>
<td>Confirm H1</td>
</tr>
</tbody>
</table>

A study of the relationship between time pressure factor of challenge stressors and self-efficacy. Given the significance of the Pearson test (Sig=0.048) is smaller than \( \alpha = 0.05 \). So we can confirm \( H_1 \) and say that there is relationship between Time Pressure factor of challenge stressors and self-efficacy at Islamic Azad University branches in Ardabil province.

**Hypothesis 2:** There is a significant relationship between task complexity factor of challenge stressors and self-efficacy at Islamic Azad University branches in Ardabil province.

\( H_1 \): There is relationship between task complexity factor of challenge stressors and self-efficacy at Islamic Azad University branches in Ardabil province.

\( H_0 \): There is not significant relationship between task complexity factor of challenge stressors and self-efficacy at Islamic Azad University branches in Ardabil province.

Correlation analysis has been done in order to determine the relationship between task complexity factor of challenge stressors as independent variable and self-efficacy as dependent variable. The correlation analysis result between these variables is shown in table 3.

Table 3- the relationship between task complexity factor of challenge stressors and self-efficacy

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>Correlation experience</th>
<th>Significance level</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>task complexity factor of challenge stressors</td>
<td>Self-Efficacy</td>
<td>0.203</td>
<td>0.042</td>
<td>Confirm H1</td>
</tr>
</tbody>
</table>

A study of the relationship between task complexity factor of challenge stressors and self-efficacy. Given the significance of the Pearson test (Sig=0.042) is smaller than \( \alpha = 0.05 \). So we can confirm \( H_1 \) and say that there is relationship between task complexity factor of challenge stressors and self-efficacy at Islamic Azad University branches in Ardabil province.

**Hypothesis 2:** There is a significant relationship between responsibility factor of challenge stressors and self-efficacy at Islamic Azad University branches in Ardabil province.
H₁: There is relationship between responsibility factor of challenge stressors and self-efficacy at Islamic Azad University branches in Ardabil province.

H₀: There is not significant relationship between responsibility factor of challenge stressors and self-efficacy at Islamic Azad University branches in Ardabil province.

Correlation analysis has been done in order to determine the relationship between responsibility factor of challenge stressors as independent variable and self-efficacy as dependent variable. The correlation analysis result between these variables is shown in Table 4.

Table 4- the relationship between responsibility factor of challenge stressors and self-efficacy

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>Correlation experience</th>
<th>Significance level</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility factor of challenge</td>
<td>Self-Efficacy</td>
<td>0.491</td>
<td>0.000</td>
<td>Confirm H₁</td>
</tr>
<tr>
<td>stressors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A study of the relationship between responsibility factor of challenge stressors and self-efficacy. Given the significance of the Pearson test (Sig=0.000) is smaller than $\alpha = 0.05$. So we can confirm H₁ and say that there is relationship between task complexity factor of challenge stressors and self-efficacy at Islamic Azad University branches in Ardabil province.

CONCLUSION

This study has done to surveying the relationship between challenge stressors and self-efficacy among faculty member of Islamic Azad University branches in Ardabil province. Task Complexity, Time Pressure and Responsibility study as the independent variable and the self-efficacy as dependent variables. For this purpose we developed three hypotheses and test them. Data collected in this study by questionnaires. And findings show that:

- There is significant relationship between Time Pressure factor of challenge stressors and self-efficacy at Ardabil branches of Islamic Azad University.
- There is significant relationship between Task Complexity factor of challenge stressors and self-efficacy at Ardabil branches of Islamic Azad University.
- There is significant relationship between Responsibility factor of challenge stressors and self-efficacy at Ardabil branches of Islamic Azad University.

References


