

# **Stress and its effects in management training performance**

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## **ABSTRACT:**

Stress can be defined as the way you feel when you are under unusual pressure. It is already part of the contemporary corporate environment and is commonly associated with a negative influence. Thus, prolonged stress affects the physical and mental health of employees, decreasing productivity and modifying company bottom line results. Stress can also be positive when a moderate level of it, results in a better performance. There is a lot of literature regarding the negative effects of stress in many professions, yet there is a lack of information regarding how stress impacts the performance of an instructor in management training. In this study, a consulting training company provided the data to fill the gap in this specific context. This research investigates the relation between instructor's stress in the delivery of management trainings and its results in terms of participants perception. Data from 23 surveys done with six instructors were collected to measure the stress level of each instructor at the time of each workshop. Data from 305 post training evaluations were used to analyze if there was a relation between stress level and the instructor's performance. The analysis of the responses showed that there was no direct impact regarding the instructor's performance when exposed to stress situations. However one final survey was conducted with instructors to understand what kind of coping mechanisms were used to deal with stress.

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## **Keywords**

Stress, performance, workshop, instructor, training

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# 1. Introduction

Selye's first definition of stress was "the non-specific neuroendocrine response of the body" (Selye, 1936, 1956). Later on he dropped "neuroendocrine" because he realized that in addition to the involvement of the neuroendocrine system, almost every other organ system (e.g. especially the cardiovascular, pulmonary, and renal systems) is affected in one or several stages of the stress response, i.e. in the alarm reaction, stage of resistance and/or stage of exhaustion (Selye, 1956, 1971, 1974).

As a medical student, Selye observed that patients suffering from different diseases often exhibited identical signs and symptoms. They just "looked sick". This observation may have been the first step in his recognition of "stress". (Rosch, 2017)

In our society, stress is becoming a very important matter, mainly because of work related stress, that can arise from multiple sources, competition, multitasking, organizational and personal problems (Beehr, Jex, & Ghosh, 2001). Companies spend a lot of money on stress, the estimated costs related to work stress on the business sector in the United States only are roughly about 200-300 billion dollars a year (Rosch, 1998).

Stress can manifests in a chronic or ongoing situation that starts to obstruct the individual everyday life, it can cause problems such as dissatisfaction, exhaustion and burnout (Dejours, 1992). These indications can be described as an imbalance in health, leading employees to absenteeism at work, generating sick leave and requiring the company to replace employees and bearing with transfers, new hires, new training, among other expenses. Depending on how the company deals with the stress situations, the quality of services provided by the employee and the level of production are seriously affected, as well as its profitability (Jimenez-Moreno, 2000) (Schaufeli, 1999). Usually the perception about stress is related with something negative, unpleasant. However, a certain degree of stress at work can have a positive effect, when prepares the individual to act, as a driving force to reach its goals. Definition of stress should therefore also include good stress, or so called eustress. It can be helpful and good when it motivates employees to accomplish more (Selye, 2017). This is a type of mild stress that people experience on a regular basis. Instead of debilitating them, it will inspire and propel them to complete a given task or goal. Instead of being harmful and mild bouts, eustress have been shown to actually enhance and improve cognitive brain function. (Hansen, 2015)

There is a lot of literature about how stress affects employees in general at their workspace. On the other hand, studies investigating how a consulting management instructor is affected by stress are lacking, which represents a gap on this specific scenario. It is shown in literature that employees upon stress face absenteeism, which is basically the act of missing work. In the specific setting of a training consultant something additional occurs, it is called presenteeism, which is defined in terms of lost productivity that occurs when employees come to work ill and perform below par (Cooper, Occupational Medicine, 2008). This happens mainly because of the fear of being replaced and also because of the commitment with client and participants of the workshop. In a consulting company a training session/workshop requires preparation, dates and venue

are booked months ahead, participants plan their attendance with anticipation and the instructor has a very specific moment to deliver its service which will be evaluated immediately after the delivery. If the instructor is not able to conduct the session for any reason, it will be very difficult to regather all participants and rescheduled the availability of the participants again, this scenario of abseteeism is worse when the workshop is abroad, once is more difficult to replace the consultant. Therefore the stress during a training session is punctual, different from the stress caused by a daily routine in a company. That's what makes the subject interesting, to investigate stress, under these conditions. The research that will be conducted in this paper is about the impacts of stress in a specific setting, the investigation is to determine how stress can affect an instructor and the impact it has on the outcome of his trainings. In this study an SME Consulting Company provided the necessary data in order to conduct this research. This company is a training provider on project management and problem solving decision-making, for companies in Latin America. The company was founded in 1998 in Brazil, helping their clients directly or through partnership to develop specific trainings upon the above-mentioned subjects related to improve hard and soft skills. The majority of trainings are conducted as "workshops", when participants have the opportunity to apply concepts using their own projects as backdrop. For the understanding purposes, trainer and instructor will be use as synonyms.

## 1.1 Research Objective

The research approach will help to fill the gap regarding how stress can affect training performance, as there is very little literature about stress and its impact in this specific scenario. This research will give the opportunity to comprehend the difference between stress in the workplace for those who have to work in an every-day job with routine operations, with those who work with specific time frames, for example an instructor.

The research contribution will help to fulfill the gap found and gather data about instructor's stress and how it impacts training performance. The following research question is going to be taken for closer investigation:

*How does instructor's stress affect training delivery?*

First a literature review will be conducted, in order to give a deeper insight on the topics related to; stress and its effects, stress on the workplace environment, and trainings. Second, the methodology will be discussed. Third, the results of this research will be presented, which will be followed by findings, limitations and conclusion.

## 2. Literature Background

### 2.1.1 Stress

Almost every organ system (e.g. especially the cardiovascular, pulmonary, and renal systems) is affected in one or several stages of the stress response (Selye, 1974). Selye created the word stressor as the factor/agent that triggers the "stress" response. He emphasized that the stressor may be physical (e.g. cold and heat), chemical (e.g. formalin and ether), or psychological in nature. Studies point out that there are three phases on how the stress process begins (Lipp, 2010). First phase;

the individual does not perceive what is happening, and presents some changes of behavior. Second phase; the individual's body begins to adapt to changes and third phase changes occur that affect the individual's psychological.

There are several views about stress, and according to (Tamayo, 2004) stress is not a disease but a reaction of the body to one or more overloads. (Nakayama & Bitencourt, 1998) Defines stress as an epidemic in which society becomes complex and competitive, people leave their well being in the background.

### 2.1.2 Stress in the work place

Work related stress is a growing problem around the world that affects not only the health and well-being of employees, but also the productivity of organizations (Public-Services, 2007). Stress at work can cause fatigue, which causes large physical damage or impairment of other psychosomatic manifestations in the most vulnerable individuals. Several studies have linked stress to work related events, the work environment have changed and accompanied the advancement of technology, with more speed than the actual adaptability of workers (Carven, 2007). Today, the concept of burnout is considered to be one of the main causes of professional stress (Freudenberg, 1974).

Both authors Freudenberg and Richelson place burnout as a result of work-situations, especially in professionals who work in contact with other people. In business, the negative impact of stress has been estimated based on the assumption and findings that stressed workers diminish their performance and increase the costs of organizations with health problems, with increasing absenteeism, turnover and number of accidents at work (Beehr, Jex, & Ghosh, 2001).

The International Labor Organization (ILO, 2012) points out that occupational stress is currently one of the most important global health issues and has been a concern in many countries in different working contexts. This concern is due to the negative impact that stress causes on the physical and mental health of workers, raising the already high rates of work leave, with evident decrease of productivity in work organizations.

Work related strains certainly have the potential to increase managerial awareness of stress in the workplace (Barling, 2005). Once managers are aware and concerned about stress, the next logical question is "What are we going to do about it?" For the most part, organizations have responded to this question by offering employees a variety of interventions (under the general rubric of "stress management training") designed to help employees cope more effectively with workplace stress (Beehr, Jex, & Ghosh, 2001).

The fundamental assumption behind stress management training programs is that employees are capable of modifying their reactions to stressors but that the stressors themselves are relatively unchangeable or that the cost of changing them would be prohibitive. (Cooper, 2006).

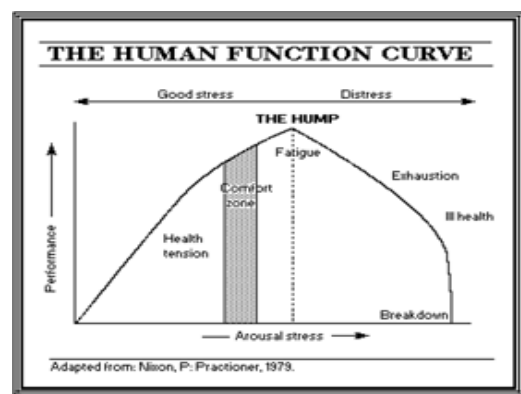
### The Problem of Stress

| For de Individual               | For the Workplace / Organization          |
|---------------------------------|---|
| <b>Threats to:</b>              |   |
| •Health                         | Increase absenteeism and turnover         |
| •Well-being/quality of life     | Reduce quantity and quality o work        |
| •Functioning / goal achievement | Reduce job satisfaction and morale        |
| •Self-esteem/ confidence        | Problems of recruitment                   |
| •Personal development           | Poor communication and increased conflict |

(Cooper,1999)

## 2.2 Positive and Negative Stress (Eustress and Stress)

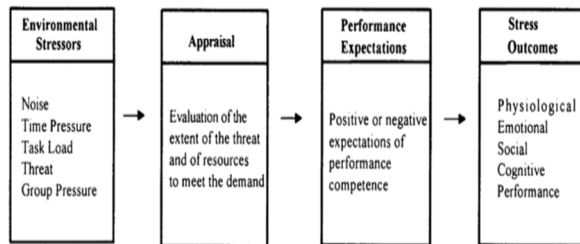
A positive stress does exist, called eustress. It makes the employee alert and increases adrenaline. It helps in productivity and gives wings to creativity. But if kept for a long time, it can become harmful (Unimed, 2016). Some external pressures can be positive, helping employees to be more productive, giving them power and control over work. But this experience may differ from each person (Hannan & Freeman, 1989). It is dangerous to go beyond individual limits and exhaust the capacity to adapt. Here, comes the opposite effect: mental energy is reduced, productivity and work ability falls. In this phase, in addition to strength and vigor, stress often causes tachycardia, muscle tension, dry mouth, knot in the stomach, cold and sweaty hands, and in more advanced stages, generalized wear sensations and memory difficulties. Negative results that may occur at work due to stress must always be monitored such as absence at work, fall in productivity, social isolation, conflicts between the team and more authoritarian attitudes (Limongi-França, 2003). The figure bellow shows the human function curve in which good stress and distress are opposed, showing the fatigue moment where distress starts to impact performance.



Although what one person may perceive as stressful, another may view as challenging. Whether a person experiences work related stress depends on the job, the person's psychological make-up, and other factors (such as personal life and general health) (Public-Services, 2007).

## 2.3 Workplace Stressors

The workplace is an important source of both, demands and pressures, which ends up causing stress. The workplace issues that have been found to be associated with stress and health risks can be categorized as those to do with the content of work and those to do with the social and organizational context of work (Michie, 2002). Include long hours, work overload, time pressure, difficult or complex tasks, lack of breaks, lack of variety, and poor physical work conditions (for example, space, temperature, light) (Michie, 2002)



(Driskell & Salas, 1996)

## 2.4 Employee's Symptoms of Work Related Stress

Work related stress is a common phenomenon that is acknowledged to have adverse effects on both physical and psychological well-being (De Lange *et al*, 2004; Fifield *et al*, 2004; Moller *et al*, 2005). In an age of intense competition, both among organizations and among professionals, different researches have been conducted on the nature and mechanisms of occupational stress and its consequences for employee health and performance (Cavanaugh, Boswell, & Roehling, 2000). There are some indicators that may help into identifying work related stress divided in physical symptoms, psychological symptoms and behavioral symptoms.

Physical symptoms include: (Fatigue, muscular tension, headaches, heart palpitations, sleeping difficulties, such as insomnia, gastrointestinal upsets, such as diarrhea or constipation and dermatological disorders.)

Psychological symptoms include: (Depression, anxiety, discouragement, irritability, pessimism, feelings of being overwhelmed and unable to cope, cognitive difficulties, such as a reduced ability to concentrate or make decisions.)

Behavioral symptoms include: (An increase in sick days or absenteeism, aggression, diminished creativity and initiative, a drop in work performance, problems with interpersonal relationships, mood swings and irritability, lower tolerance of frustration and impatience and disinterest.) (Public-Services, 2007)

## 2.5 How Employees Cope With Stress

There are a few ways that can help to fight stress such as, identify the cause, have healthy eating, sleep well, practice physical activities or in most severe cases seek psychological help. However, to avoid it, the best way is to define priorities, make a list of the most urgent activities, not to overload, do not worry about being right

all the time, learn to forgive, accept the fact that everyone makes mistakes, let anger aside, have relaxing moments (Public-Services, 2007). It is important for employers to recognize work related stress as a significant health and safety issue. A company can and should take steps to ensure that employees are not subjected to unnecessary stress (Public-Services, 2007). A lot of employees express weaknesses in their workplace, a proper training program allows employee to strengthen those skills, leading employee to perform better. A structured training ensures that employees have a consistent experience and background knowledge; therefore they have an advantage over employees, which did not have the same opportunity. Training creates a supportive workplace, helping employees to cope with stress (Monneuse, 2013) and identifies presenteeism, which is the opposite from absenteeism. Presenteeism is as a common thread in employees across the whole organizational spectrum who are under pressure to be at work. This pressure (or perceived pressure) might come from colleagues, clients, managers or other players. The 'causes' of presenteeism can be divided into those that are voluntary (such as interest or professionalism) and those that are involuntary (where the cost of absence is too high for the employee or the organization, for example, where people are hard to replace or there is job insecurity). Making employees attend their jobs even though they are not capable too (Brun and Biron, 2006), suggest that involuntary causes are the most frequent, representing 54.4 per cent of presenteeism cases.

## 2.6 Stress Models

Different stress models are discussed and explained in this next topic. (1) The outcome relevance model focus on the psychological, physiological, and behavioral stress (i.e., individual or organizational), (2) McGrath's Process Model of Work Stress that focused largely on the impact of stress on performance-related behaviors. Each models portrait stress in different settings. (Barling, 2005)

### 2.6.1 Outcome Type by Outcome Relevance Model

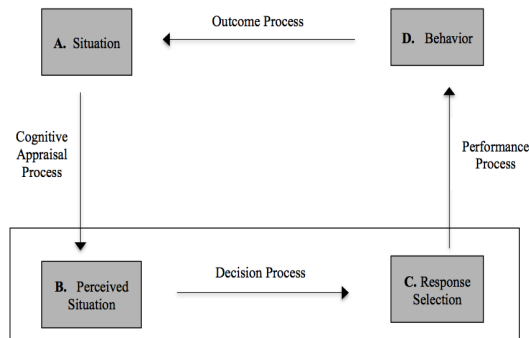
Given these considerations, it is possible to classify stress outcomes as being primarily relevant to the *individual* or primarily relevant to the *organization*. Thus, the previously discussed stress outcomes (i.e., psychological, physiological, and behavioral) can be meaningfully crossed with the primary target of relevance (i.e., individual or organizational) to form the matrix shown below.

|               | Individual  | Organizational   |
|---------------|---|--|
| Psychological | Anxiety<br>Depression<br>General Well-Being                           | Job Dissatisfaction<br>Low Organizational Commitment<br>Low Job Involvement<br>Job Frustration |
| Physical      | Psychosomatic<br>Symptoms Health<br>Problems<br>Physiological Indices | Sick Days,<br>Health Care Utilizations<br>Workers Compensation Claims                          |
| Behavioral    | Drug and Alcohol Use<br>Risk Taking<br>Decreased Health<br>Behavior   | Decreased Job Performance<br>Accidents<br>Counterproductive Behaviors                          |

(Barling, 2005)

## 2.6.2 McGrath's Process Model of Work Stress

(McGrath, 1976) proposed a model of work related stress that focused largely on the impact of stress on performance-related behaviors. Given this focus, McGrath's model may be a bit more informative with respect to organizational consequences, as can be seen below.



(McGrath, 1976)

The model begins with the objective situation (Box A). This situation is then perceived by the employee (Box B) and a choice is made regarding the most appropriate response to the given situation (Box C). Once a response is selected, the employee engages in the chosen behavior (Box D), which in turn affects the objective situation (Box A).

McGrath's process model appears to be focused on organizationally relevant outcomes. As such, this model can provide some guidance in understanding the impact of workplace stressors on organizational well-being.

As was shown in this section, models of stress have been developed to explain outcomes that are relevant to both individuals and organizations. Nevertheless, there is some difference between models in terms of how explicitly they distinguish between individual and organizational outcomes.

## 2.7 Trainings

Training is a planned and systematic effort to modify or develop knowledge/skill attitude through learning experience. Its purpose, in the work situation, is to enable an individual to acquire abilities in order that he or she can perform adequately a given task or job and realize their potential (Buckley & Caple, 2009). Training usually involves the acquisition of behaviors, facts and ideas that are more easily defined in a specific job context. Training is more job-orientated than person-orientated (Barrington and Brown, 2004). The ability of a participant to acquire knowledge, skills and attitudes in a training context may depend directly or indirectly on the quality of previous educational experiences. The world of work continues to become more and more complex and for everyone, including trainers, there are many learning curves ahead. According to (Senge, 1990), as the world becomes more interconnected and business becomes more complex and dynamic, work must become more learningful, indicate that there will be a crucial and demanding role for training in the future (Buckley & Caple, 2009).

Considering the lack of literature regarding instructor's performance under stress in this specific training setting, a hypothesis has been created to learn about the effects of stress in this context. Keeping the above-mentioned literature in mind, the hypothesis below will be taken under investigation:

*H1: Instructor's Performance is affected negatively by Stressful situations.*

## 3. Methodological Approach

This research method is going to be structured as follows:

- 1) Literature Review
- 2) Gather data from former post-evaluations trainings
- 3) Conduct Surveys with trainers to assess stress level
- 4) Analyze if there is a relation between instructor's stress and trainings performance

First, a literature review will be conducted as reference point for an explanation to important definitions, concepts, models and identifying literature gaps. The literatures used in this research were books, articles and business reviews, also a web search on Google-scholar, to find a variety of materials related to the topic. For the purpose of anonymity the organization under research shall be called The Consulting Company.

### 3.1 Data Collection

#### 3.1.1 Post Training Evaluation

The data in this research will be gathered by using the post-training evaluations from previous two months, that was provided by the company (quantitative survey). The instructors do not have accesses to the evaluations, as it goes from the client directly to the Consulting Company data base, therefore they do not know if there was any impact of any kind of stressful situation that might have compromised the workshop. The company feedback to the instructors is done every quarter. Post training evaluation also known as reaction evaluation is a common tool used to assess the response of the participant regarding training and learning experience as well as analyze instructors performance.

Kirkpatrick's four levels evaluation model, describes the evaluation process in 4 different stages; first stage is reaction, it is the trainee reaction to the training in terms of structure, content and method; second is learning: the amount of learning achieved; third is behavior: any changes because of training experience in terms of job behavior; last are the results: the tangible aspects of the behavioral change in the business performance of the attendee. (Kirkpatrick & Koehler, 1996) According to ITOL, Institute of Training and Occupational Learning, in its glossary of training and learning terms (ITOL, 2000) assessment is an exercise that seeks to measure a learner's skills, performance or knowledge in a subject area. This may be either prior to, during or following the learning (Rae, 2002). The post evaluation from the consultant company only captured the participant's opinion related with their learning experiences. This represents only the first level of Kirkpatrick's evaluation model. Among the different questions from the post training evaluation, only the question related with

instructor's overall performance was used as input data (question number 6). The post-evaluation can be seen in Appendix. The table below shows the total number of post evaluation used, divided by each of the 6 instructors:

| Instructor                             | Number of trainer delivery | Number of Post Training Evaluation Collected |
|--|----------------------------|--|
| Instructor A                           | 4                          | 54   |
| Instructor B                           | 5                          | 57   |
| Instructor C                           | 3                          | 44   |
| Instructor D                           | 3                          | 45   |
| Instructor E                           | 4                          | 52   |
| Instructor F                           | 4                          | 53   |
| <b>TOTAL NUMBER OF POST-EVALUATION</b> |                            | <b>305</b>                                   |

The first step of gathering data was collected from post training evaluations from different trainings done by participants/client in the past two months. Combining all instructors and their workshops, it was gathered from the Consulting Company 305 post-training evaluations from that period; this represents the quantitative research. With this information it was possible to indentify the seminars that were not successfully evaluated regarding instructor performance, and relate the post evaluations that were not successful with the instructors level of stress at the time.

### 3.1.2 Survey, Measuring Stress Level

The instructor stress level was measured by a survey that was conducted with each of the 6 instructors. Each instructor filled up a survey for each workshop they have done in the past two months, the total number of surveys is 23. The table bellow shows the number of workshops done per month by each instructor in the past two months. Therefore the total number of surveys collected each months are described bellow:

| Instructor   | April | May | Total     |
|--------------|-------|-----|-----------|
| Instructor A | 2     | 2   | 4         |
| Instructor B | 2     | 3   | 5         |
| Instructor C | 2     | 1   | 3         |
| Instructor D | 1     | 2   | 3         |
| Instructor E | 3     | 1   | 4         |
| Instructor F | 2     | 2   | 4         |
| <b>Total</b> |       |     | <b>23</b> |

The data collected made it possible to stablish if there is a relation between instructors performance (reflected in the post training evaluations) and instructor's stress level at the time (reflected in the surveys). Next, it was examined if there is a relation between the quality of the outcomes from the post-evaluations and instructor's stress level at that time, this will be determinant to gather data to establish the relation between stress / trainings outcomes. For the purpose of measuring the level of stress of the instructors and due to the absence of such mechanisms to measure stress in the context of training, an instrument called the Perception Scale of Stress by Trainers was developed. This Stress Perception scale was based upon two instrumental theories. The first one is by Paschoal, Tatiane, & Tamayo, Álvaro. (2004). This instrumental theory is useful as an alternative in empirical

investigations and organizational diagnostics and can be useful indicators for organizational decisions in relation to the life quality of the Workers. Second, created by teachers (EPEOP) created by (Vale, Silvia Fernandes do, Maciel, Regina Heloisa, & Carlotto, Mary Sandra, 2015). This instrumental theory discusses the differences between the teaching of children and adolescents (pedagogy) and adult education (andragogy).

The survey below called Stress by Trainers Perception Scale is composed by 10 items representing different stressors. The response to the item indicates the reaction of the respondent to it, given in a Likert 5-point scale. The value "1" corresponds to "does not affect you", while "5" represents the maximum value with which the stressor affects you negatively.

|   | Poor | High    |
|---|------|---------|
| 1. What was the stress level 2 days before the training   | 1    | 2 3 4 5 |
| 2. What was the level of stress during the training   | 1    | 2 3 4 5 |
| 3. In your opinion how did your stress level affect the training  | 1    | 2 3 4 5 |
| 4. What was the stress level when the group is too autorogenous (manager/director/marketing/finance)                | 1    | 2 3 4 5 |
| 5. Were there any external factors that contributed to the stress level during the training. If yes, to what extent | 1    | 2 3 4 5 |

Later an analysis will be showed with the major findings and results. A conclusion of this research will be presented.

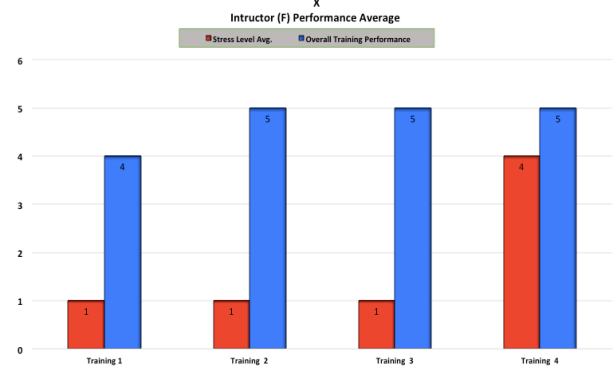
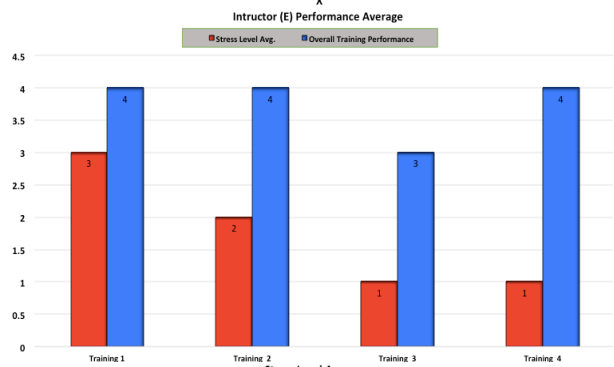
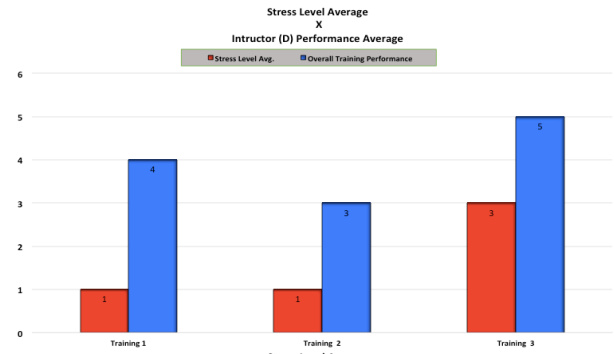
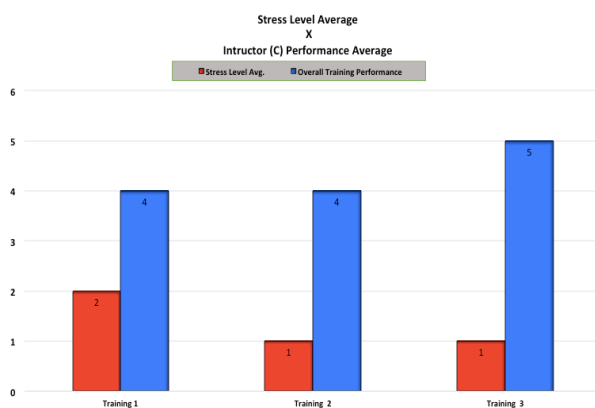
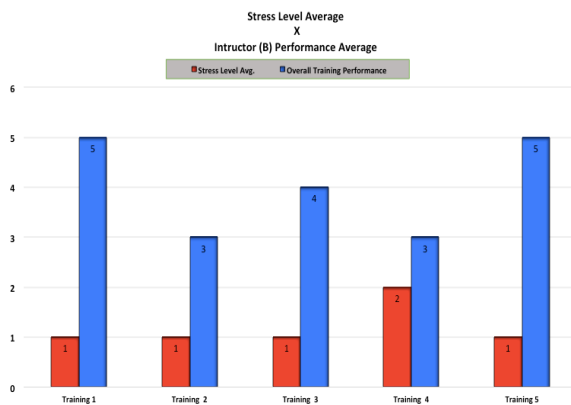
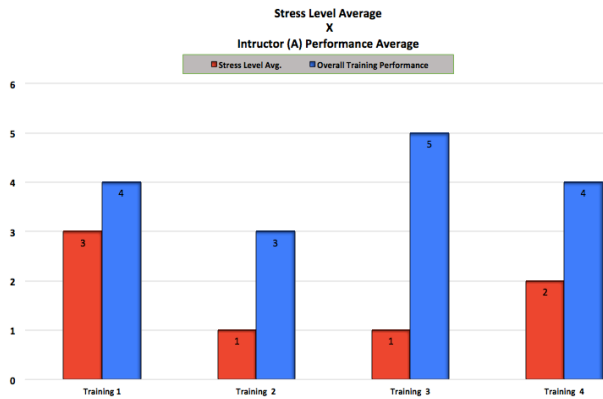
## 3.2 Data Analysis

The analysis of the data was indicated and presented in tables and figure. The data gathered for this research (post-evaluations) were provided by the consulting company. The (stress level survey) are both quantitative data in numeric form. The final data in which the relation between stress level and performance was separated into six different graphs, one graph for each instructor. In this graphs it is possible to see the stress level average, which was measured by each instructor for each of his trainings. Also the overall training performance was measured by the post-evaluations, which was done by the participants. A Likert 5-point scale measured the two surveys. Comparing each training, with the two different variables it was possible to determine what is the relation between level of stress and the performance of the instructor in the specific training. Also the data will be statistically analyzed using SPSS. A positive relationship between the variables is expected. A Pearson-Bivariate correlation will be used to determine the strength of the relationship between stress and performance during a workshop. Also a table with the descriptive statistics will be presented.

## 4. Results

In this chapter two different surveys were analyzed. First the 305 post-evaluations, done by the participants, where they rated the performance of each training. Second the stress level survey, which was answered by the six instructors (A,B,C,D,E,F) on each of the given trainings. Next, the six graphs bellow, shows the relation between stress level and performance for each training made by each instructor. As a result, a very weak relation between the instructor's performance and their stress level was found. This measurement was able because a survey

captured their stress level in each of the trainings and it was compared with the overall training performance. The conclusion drawn by analyzing the tables is that there was no relation between stress level reported by the instructor and instructor performance graded by the participants. It can be also concluded that stress did not affect instructors in a negative way.



### Correlation Table

|                    | Stress              | Performance |
|--------------------|---------------------|-------------|
| <b>Stress</b>      | Pearson Correlation | .154        |
|                    | Sig.(2-tailed)      | .482        |
|                    | N                   | 23          |
| <b>Performance</b> | Pearson Correlation | .154        |
|                    | Sig.(2-tailed)      | .482        |
|                    | N                   | 23          |

### Descriptive Statistics Table

|             | Mean  | SD    | Min  | Max  |
|-------------|-------|-------|------|------|
| Stress      | 1.565 | .1867 | 1.00 | 4.00 |
| Performance | 4.130 | .1578 | 3.00 | 5.00 |



## 5. Findings

The instructor's job is to deliver the workshop, in the day and place scheduled, due to the commitment with the company and the participants involved. Dealing with a stress situation is a priority for many jobs, stress is one of the biggest reasons for absenteeism, which is the absence from work, in the case of an instructor, this situation must be avoided at all costs. According to the surveys (post evaluation) and (stress level survey) analysis, although the literature emphasis the negative ways of stress upon the workplace, there was no significant relation between variables stress level and instructor's performance.

The results present that the instructors that reported stress situations, at the survey, were able to cope with that stress during the training.

The statistical findings showed that there was a weak, positive correlation between stress and performance ( $r = .154$ ,  $n = 23$ ,  $p = .482$ ). the model is not statistically significant with a  $p$  value of  $.482$ , as it exceeds the threshold of an alpha of  $0.05$ . The relationship is weakly positive. The statistical outcome shows that, the existing relationship between stress research and performance is not proven and unreliable.

### 5.1 Additional Findings

After the final findings it was determined that there was no relation between instructor stress level and the ways it impacted their delivery performance. Therefore after these findings, it was decided to conduct an additional survey, of one question (qualitative) to find out the ways that each instructor coped with stress and determine, how they deal with stress situation, in a way that it has not affect their training delivery.

The following question was sent to the six instructors, to understand their coping mechanism when there was a stress situation experienced during the training.

1. In the last six months do you remember facing any kind of stress situation? if yes, what were your coping mechanisms so that stress would not affect your training.

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The survey showed that there are different types of mechanisms that the instructors performed in order to cope with stressful situations.

Setting the answers together, it was possible to obtain the following findings; Instructors received an intensive training in order to master the material, also they are trained to face stressful situations with problems in the infrastructure of the venue, always keeping a second material plan in place if necessary, at the consulting company, all the instructors learn how to deal with presenteeism, which is coming to work despite illness, due to the difficulty on replacing an instructor suddenly. Some instructors complain about back-pains, headaches, flues that made it difficult to conduct the training, but they have learned ways to deal with the obstacles to conduct the seminar without complications.

## 6. Conclusion

Considering that stress is one of the main contributors to job burn-out in the workplace, this study examines the impact of instructor's stress in a delivery of a management training. Through this survey, it was

possible to collect data regarding the stress level of six instructors when conducting 23 management trainings and how stress situation experienced during the period of the training affected their performance.

The overall instructors' performance was established by using 305 post-training evaluations done by participants, after each management training in the past two months.

According to the Consultant Company, some mitigation measures are taken in order to minimize stress situation during trainings such as; hiring experienced employees and having a well structure training format. The latter works like a guide to steer the instructor during the whole training as a tool to deal with pressure and stress situations. A relation between the level of stress and the instructor performance was analyzed. Despite of the fact that the literature review showed a strong relation between the negative aspects of stress and work performance, the findings of this study was unexpected since could not back up the literature. The analysis conducted revealed a very weak relation between stress and management instructors performance. Even though some instructors experienced a stress situation before or during the workshop, stress was not pointed out as a reason for a not successful post-training evaluation. Potential explanations for these findings are based on the results of the additional survey done after the research. Instructors not only receive directions in advance about how to deal with stress situations but also counter measures are developed to be used as contingencies. A combination of a well structure training format and risk management responses allowed instructors to face stress situations in a satisfactory way, although instructor's surveys detected levels of stress during workshops, mechanism mentioned before permitted that the final training performance was not affected. In addition to that, the commitment towards the company/clients and the concern of being replaced act like stimulants to overcome stress situations.

## 7. Academic Relevance, Future Research and Limitations

### 7.1 Academic Relevance Limitations

Literature suggests that stress can cause disturbance and lack of performance on employees (Carven, 2007). This study adds insights on the effect of stress and how it impacts an instructor performance. It shows a different results comparing with theoretical background on stress and its effect on the work environment. This research brings light to a specific context; stress in the training setting. It also contributes to understand what are the stress coping mechanisms in such a specific setting.

### 7.2 Limitations and future Research

The lack of literature on the effects of stress in the training setting was a limitation to relate stress with the specifics characteristics of the instructor's profession. For future research is recommended to use a larger sample of instructors and companies and a longer time frame (not only two months). The use of 6 instructors as a total sample may not be sufficient to determine a solid correlation between the variables used in this study (stress and performance). New research should be focused also in a more heterogeneous sample. Experienced instructors may have developed natural stress coping mechanisms



along the years, less experienced instructors could bring different angles in terms of stress consequences.

For this reason future research should be inspired because it can lead to sustaining results both for literature and managerial implications.

Furthermore, Scholars have the opportunity in future research to create a stress model for the specific training setting, which could encompass the coping mechanisms and explore the different ways that presenteeism impacts instructor's performance

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## 8. Appendix

### 8.1 Stress by Trainers Perception Scale- Survey

This Survey has the purpose to measure the stress level of the instructor on a specific workshop, please grade 1 to 5 to the questions and statements below by doing an X in the degree that best reflects your opinion, where 5 represents the maximum level of satisfaction and / or concordance:

|   | Poor |   |   |   | High |
|---|------|---|---|---|------|
| 1. What was the stress level 2 days before the training   | 1    | 2 | 3 | 4 | 5    |
| 2. What was the level of stress during the training   | 1    | 2 | 3 | 4 | 5    |
| 3. In your opinion how did your stress level affect the training  | 1    | 2 | 3 | 4 | 5    |
| 4. What was the stress level when the group is too eutorogenous (manager/director/marketing/finance)                | 1    | 2 | 3 | 4 | 5    |
| 5. Were there any external factors that contributed to the stress level during the training. If yes, to what extent | 1    | 2 | 3 | 4 | 5    |

## 8.2

## Project management

### Post-Evaluation

In order for this program to be evaluated and improved, please grade 1 to 5 to the questions and statements below by doing an X in the degree that best reflects your opinion, where 5 represents the maximum level of satisfaction and / or concordance:

1. In what level was my expectations full field?

1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( )

2. Have the objectives proposed by this seminar been met?

1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( )

3. What is the relevance of this training on your day-to-day work?

1 ( ) 2 ( ) 3 ( ) 4 ( ) 5 ( )

Evaluate the following questions:

4. Instructor's knowledge on the subject given 1 2 3 4 5

5. Instructor's ability to conduct the seminar 1 2 3 4 5

6. Evaluate the instructor as a whole 1 2 3 4 5

7. Didactic material used and distributed 1 2 3 4 5

8. Facilities and infrastructure 1 2 3 4 5

Name ( optional ) \_\_\_\_\_

Date \_\_\_\_\_

Company \_\_\_\_\_

### 8.3 Addition Findings-Survey

1. In the last six months do you remember facing any kind of stress situation? if yes, what were your coping mechanisms so that stress would not affect your training.

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### 8.4 Correlation Table

**Correlations**

|             |                     | Stress | Performance |
|-------------|---------------------|--------|-------------|
| Stress      | Pearson Correlation | 1      | .154        |
|             | Sig. (2-tailed)     |        | .482        |
|             | N                   | 23     | 23          |
| Performance | Pearson Correlation | .154   | 1           |
|             | Sig. (2-tailed)     | .482   |             |
|             | N                   | 23     | 23          |

### 8.5 Descriptive Statistics

**Descriptive Statistics**

|                    | N<br>Statistic | Minimum<br>Statistic | Maximum<br>Statistic | Mean      |            | Std.<br>Deviation<br>Statistic |
|--------------------|----------------|----------------------|----------------------|-----------|------------|--------------------------------|
|                    |                |                      |                      | Statistic | Std. Error |                                |
| Stress             | 23             | 1.00                 | 4.00                 | 1.5652    | .18678     | .89575                         |
| Performance        | 23             | 3.00                 | 5.00                 | 4.1304    | .15786     | .75705                         |
| Valid N (listwise) | 23             |                      |                      |           |            |                                |