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Relationship between Emotional Intelligence and People's Abilities to Cope with Stress

Lucile Michel⁷

Nowadays, it is really important for the researchers to understand the origins of stress, because it has been established that stress is really harmful for the human beings and is the cause to many diseases. Emotional intelligence has been shown to influence various areas of life, while several research studies state that EI has an effect on people's abilities to cope with stress. Many studies affirm that EI, because of its effect on perceived stress, would have an influence on people's aptitudes to manage a team, communicating with colleagues, and leadership skills. Because, today, in many workplaces, for interviews, managers take into consideration candidates' results, to decide to hire them, it is really important to confirm if this idea is true. The hypothesis is that people with higher EI will show higher abilities to cope with stress, whereas people with lower EI will show lower abilities to cope with stress. To observe the relationship between EI and stress coping, 30 participants were recruited through the Lindenwood Participant Pool and they had to complete three different surveys: a demographic survey, an emotional intelligence survey, and a stress coping scale. The results showed a positive and relatively strong correlation between EI and people's ability to cope with stress. These results allow us to confirm the relationship between EI and stress. People who have a higher emotional intelligence seem to keep their capabilities better in stressful situations than people with a lower emotional intelligence.

Today, the notion of emotional intelligence (EI) is everywhere. In the press, on TV, it is explained how people will have more chances to succeed in their social lives, work and love if they have high emotional intelligence. In the workplace, many employers think that EI is really important to succeed in their company. In the workplace, many executives think that EI is really important to succeed in their company. In some interviews, managers ask the candidates to pass an EI test because they consider that if they have a high quotient of Emotional intelligence, they will be more able to manage a team, understand them and they will be a better leader in every situation, including stressful ones. I decided to conduct my own study to see if this idea were true, if people who have higher emotional intelligence are able to cope with stress better than

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those with lower emotional intelligence. I want to know if people with higher emotional intelligence are better equipped to handle stressful situations, than people with lower Emotional intelligence.

The notion of stress became popular since many years, but recently has become really important to help people to cope with stress. Emotional intelligence involves one's response to stress. According to Taylor, stress influences the prevalence of disease such as, cardiovascular diseases, arthritis, hypertension and immune related deficiencies" (Taylor, as cited in Byrne, 2012). Therefore, it is important for doctors and people suffering of stress symptoms to understand where their stress is coming from and how to face it and move forward. Companies observed that stress is an important factor in their employees' efficiency and productivity. To increase their productivity, they had to increase their well being. In their research, Aftab and Javeed (2012) found that stress is related to poor health outcomes, but also less productivity, absenteeism and resignations. One of the main questions is to determine why some people are more stressed than others, why there are so many differences between individuals. New research studies show some differences between individuals with respect to emotional intelligence. Aftab and Javeed found an important correlation between coping with stress and high Emotional Intelligence.

The notion of emotional intelligence is really recent. One of the first complete definitions was written by Salovey and Mayer (1990), it is defined as: "the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional meanings, and to reflectively regulate emotions in ways that promote emotional and intellectual growth" (Salovey and Mayer, 1990). Then, in 1995, Daniel Goleman went further, and said that if people have a high emotional intelligence, there will be able to perceive and understand the

emotions in other people. He also thought that high levels of EI were applicable in a business context” (Goleman, 1995). Many recent studies have found a correlation between people’s emotional intelligence and their ability to cope with stress. Researchers have observed this phenomenon in different places.

Slaski and Cartwright (2002) conducted an experiment on more than 300 managers from an English organization. For their study, they used self-report surveys to assess emotional intelligence, general health, and subjective stress. They found that a high score in the emotional intelligence tests indicated lower level of stress, better health and better management performance.

In 2004, a qualitative research study conducted on dental students showed that different levels of emotional intelligence relates to the development of different skills. Students who scored high on emotional intelligence adopted skills such as “reflection and appraisal, social and interpersonal, and organization and time-management” and student who scored low on emotional intelligence were more likely to engage in health-damaging behaviors such as anxiety. (Pau, Croucher, Sohanpal, Muirhead & Seymour, 2004).

Arora and his colleagues (2011) did an experiment on medical students. They observed that students with a high score of emotional intelligence were performing better in stressful situations like surgeries, and they were likely to recover better after it (Arora, Russ, Petrides Sirimanna, Aggarwal, Darzi & Sevdalis, 2011).

Another study from last year by Byrne (2012) showed that high level of emotional intelligence correlated with lower level of perceived stress. This study showed that people who have a higher quotient of emotional intelligence will interpret a situation differently than people

with a lower quotient of emotional intelligence. The individuals who have a lower emotional intelligence can imagine a situation more stressful than it really is.

So, even if all researchers on this subject do not always find a link between emotional intelligence and the way people cope with stress, most of them do. What I ended up doing was to design a correlational study that assessed the relation between EI and people's ability to cope with stress. In this experiment, the participants will be at Lindenwood University. The hypothesis is that people with higher EI will show higher abilities to cope with stress, whereas people with lower EI will show lower abilities to cope with stress. The participants took three surveys, a demographic survey, an emotional intelligence survey and a survey to determine the ability to cope with stress.

Method

Participants

For these studies, I recruited 30 participants who were undergraduate students from 18 years old to 31 years old. Nine were freshman, 6 were sophomore, 4 were junior and 11 were Senior. There were 15 women and 15 men.

The Lindenwood Participant Pool (LPP) was used to recruit the participants. The LPP is an ethical process to recruit the participants. The participants earned a bonus point in general education classes after participating to the experiment. An LPP approved signup sheet was created and posted on the LPP board on the fourth floor of Young Hall as well as an experiment description (see Appendix A). The students were able to sign up for a time that worked for them. All the participants received extra credit in their general education classes through the LPP.

Materials

For this experiment, three surveys were used. The first one was a short demographic questionnaire asking for the participant's sex, age and year at Lindenwood (see Appendix B). The Second survey used was a brief 10-items Emotional Intelligence Scale, a shortened self-report measure of emotional intelligence based on Salovey and Mayer's (1990) conceptualization composed of 33-ITEM Emotional Intelligence Scale (EIS; Schutte , 1998) (see Appendix C). Then, a third survey was used to evaluate how the participants were coping with stress. It was important to show how people are coping with stress and not how they are feeling when they are stressed. The third survey is a Psychometric Re-assessment of the COPE Questionnaire, created by Lyne and D. Roger, (2000) (see Appendix D).

The experiment took place in a room booked through the Lindenwood Participant Pool. It was a quiet room where the participants were able to be in a calm ambiance while they were filling the three surveys.

Procedure

The participants arrived, one by one. The participants were told how the experiment was going to be organized. After signing the informed consent (See Appendix E), they were asked to take the three surveys: first the demographic survey, then the Emotional Intelligence survey and they finished with the stress survey. The participants were told that they can stop the experiment when they wanted if they had some doubts. During this time, the researcher stayed quiet, answering the possible questions of the participants. After filling the three surveys, the researcher answered any questions from the participant. It was then specified to the participants that if they wanted to, they would be given access to the experiment's results few months later.

Results

This experiment was designed to analyze the relationships between emotional intelligence and people's abilities to cope with stress. First of all, I analyzed the correlation between the two main variables. Both of them are continuous variables, so I used a Pearson's correlation coefficient and found $r=.518$, it is a positive and relatively strong correlation. This correlation was statistically significant with $p=.003$ (see Table 1).

I also decided to analyze the differences between men's and women's results for both emotional intelligence and stress coping surveys. In order to do this, I conducted two independent sample tests, a Levene test for equality of variance and a t-test for equality of means. I did not find any significant result for stress coping but I found a difference between men and women for their results to the emotional intelligence survey.

Because I had almost the same numbers of participants enrolled in freshman and senior classes, I decided to observe the differences for the results obtained to the emotional intelligence and stress coping surveys and conducted another series of independent t-tests comparing the two classes on the two measures.. There were no significance observed but it is still interesting to observe that for both surveys, the freshman participants scored higher than the senior participants.

Discussion

After analyzing my results, I can affirm that the null hypothesis is untrue, so I reject it. The results of this study confirmed a positive and relatively strong correlation between emotional intelligence and people's abilities to cope with stress. My hypothesis was supported; the participants who scored higher on their emotional intelligence survey, also scored also higher on the test that evaluates their abilities to cope with stressful situations.

This experiment was completed with undergraduate students, which is not common, but these results support the findings of others studies done on other population on the same topics. The difference within the results observed between men and women is interesting. They may be explained by the fact that women tend to over analyze every question, whereas men do not. I have noticed that women took more time to answer the three surveys than men did. When the three surveys were completed, and I asked the participants if they had any questions or issues concerning the tests, men said that they had no issues, whereas many women were saying that some questions were complicated to answer, that they wished to select two answers for some of them.

Concerning the findings observed for the freshman and seniors participants, the results are not significant but it can be noted that for both emotional intelligence and stress coping surveys, freshman participants scored higher than seniors. The lower scores for senior participants on the stress coping surveys may be interpreted by the fact that they may be in a significant life period, really stressful, and they may realized that their strategies to deal with stress, as their time management skills are not as good as they would like them to be.

There are some limitations to this study, mostly due to the time constraint. At first, the experiment counts only 30 participants, it is a very low number to assure that the results found are not only due to chance. Secondly, two self-report tests were used in this experiment which can lead to a bias of social desirability. The participants were maybe not objective, mostly for the stress coping survey, it can be really difficult for them to judge their own reactions and feelings face to a stressful situation. Thirdly, the three surveys were given in the same order to every participant, it is possible that for the third survey, some of the participants were tired or wanted the experiment to be over, so they did not seriously filled the survey. To distribute the surveys in

different sequences for different participants may have changed the results. Finally, the survey used for emotional intelligence was only a 10-item questionnaire, and it probably did not result in an accurate score of the participants' emotional intelligence.

However, while knowing that emotional intelligence can vary and increase during life, it would be a good idea for people to take training for emotional intelligence to help them to cope better with stress, mostly during these days of economic crisis, when people are permanently stressed. Another interesting fact is that there are only few studies done on undergraduate students, and emotional intelligence and this population is really concerned by stress problems. With this study, the results show that emotional intelligence may help them to cope better with stress, therefore obtain better results and improve their mental health.

For future researches, it would be interesting to do an experiment in which the participants do not have to judge and rate their own reaction facing a stressful situation, because as it has been explained above, the results for a self-report questionnaire on stress coping can be subject to social desirability. The experiment will be to compare participants with high and low emotional intelligence on their ability to cope with stressful quizzes, such as a short mathematics test and general knowledge quiz. The results will show if those who scored higher on EI would be able to handle the stressful quizzes better than those who scored lower on EI. For this experiment, more time would be needed it would involve participants coming in twice – once to have their EI assessed and then again to come in to take the stressful quizzes depending on if they were identified as having high or low EI.

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Appendix A
Recruitment Description

Description:

In this study, you will be asked to complete three psychological surveys. The first one will be a short demographic survey, the second one will be about Emotional Intelligence and the other one will test your abilities to cope with stress. The entire procedure should take no more than 20 minutes of your time.

Sign-Up Schedule

Appendix B
QUESTIONNAIRE

1) Are you MALE FEMALE?

2) How old are you?

3) Are you a FRESHMAN SOPHOMORE JUNIOR SENIOR?

Appendix C

Brief Emotional Intelligence Scale

Scale:

1 = Strongly Disagree

3 = Agree

5 = Strongly Agree

BEIS-10

Items

Appraisal of own Emotions

I know why my emotion change

1 2 3 4 5

I easily recognize my emotions as I experience them

1 2 3 4 5

Appraisal of others' emotions

I can tell how people are feeling bu listening to the tone of their voice

1 2 3 4 5

By looking at their facial expressions, I recognize the emotions people are experiencing

1 2 3 4 5

Regulation of own emotions

I seek out activities that make me happy

1 2 3 4 5

I have the control over my emotions

1 2 3 4 5

Regulation of others' emotions

I arrange events others enjoy

1 2 3 4 5

I help other people feel better when they are down

1 2 3 4 5

Utilization of emotions

When I am in a positive mood, I am able to come up with new ideas

1 2 3 4 5

I use good moods to help myself keep trying in the face of obstacles

1 2 3 4 5

Appendix D

Stress Coping Preference Scale

People cope with difficult, stressful, or upsetting situations in a variety of ways. This self-assessment is designed to help you to estimate your preferred styles of coping.

Read each statement in this instrument and select the response that best indicates how much you tend to react in that way when faced with a difficult, stressful, or upsetting situation. This instrument has 16 statements.

I will try to figure out how to resolve the problem.

Never Seldom Sometimes Often Very Often

I will act as though nothing happened, hoping it would go away.

Never Seldom Sometimes Often Very Often

I will seek the support and guidance of other people.

Never Seldom Sometimes Often Very Often

I will get upset or angry with the people who caused the problem.

Never Seldom Sometimes Often Very Often

I will change something so the situation would improve.

Never Seldom Sometimes Often Very Often

I will avoid the problem by sleeping, watching TV, or engaging in other diversionary activities more than usual.

Never Seldom Sometimes Often Very Often

I will ask someone I respected for advice.

Never Seldom Sometimes Often Very Often

I will Try to get back at those who created the trouble.

Never Seldom Sometimes Often Very Often

I will Come up with a couple of strategies to make the situation better.

Never Seldom Sometimes Often Very Often

I will keep my concerns and emotions about the situation to myself.

Never Seldom Sometimes Often Very Often

I will talk to friends or family about my circumstances.

Never Seldom Sometimes Often Very Often

I will figure out who was responsible for what happened.

Never Seldom Sometimes Often Very Often

I will double my effort to correct the situation and achieve my objective.

Never Seldom Sometimes Often Very Often

I will put off dealing with the matter.

Never Seldom Sometimes Often Very Often

I will get sympathy and understanding from someone.

Never Seldom Sometimes Often Very Often

I will make sure that those responsible for the problem received their due punishment.

Never Seldom Sometimes Often Very Often

The source of this scale is: Based on information in: K. Lyne and D. Roger, "A Psychometric Re-assessment of the COPE Questionnaire," *Personality and Individual Differences*, 29 (2000), pp. 321-335; P. P Vitaliano, J. Russo, J. E. Carr, R. D. Maiuro, and J. Becker, "The Ways of Coping Checklist: Revision and Psychometric Properties," *Multivariate Behavioral Research*, 20 (1985), pp. 3-26.

Table 1

Correlations between measures

| | | Score for the EI Scale | Scores for the Stress coping Scale |
|---------------------------------------|---------------------|---------------------------|--|
| Score for the EI Scale | Pearson Correlation | 1 | .518** |
| | Sig. (2-tailed) | | .003 |
| | N | 30 | 30 |
| Scores for the Stress coping Scale | Pearson Correlation | .518** | 1 |
| | Sig. (2-tailed) | .003 | |
| | N | 30 | 30 |

** . Correlation is significant at the 0.01 level (2-tailed).