The purpose of the study was to evaluate the efficacy of an intervention consisting of a training program, based upon the proactive coping theory. The research was conducted on employees who work at university. After implementing the intervention, we found no differences in proactive coping competences and in the use of proactive coping between the experimental and control group. However, the training program received positive reviews, and the participants were satisfied.

**Keywords:** proactive coping; job stress; intervention; personality

### 1. INTRODUCTION

Stress is a condition or it refers to the emotions felt by a person when he or she assesses that the demands of a situation exceed his or her personal and social resources (Lazarus, 1966). Stress and coping are topics that have elicited many researches over the years due to the negative effects that stress has upon both physical and mental health and upon well-being and performance. Stress is part of the daily lives of individuals and high levels can prevent optimal functioning. As a consequence, many researches were aimed at finding how people cope with stress in various situations (Greenglass, 2002).

Coping refers to what a person can do to prevent the onset of stress or to better manage the existing stress (Greenglass & Fiksenbaum, 2009). Traditional or reactive coping is used after the onset of stress, while proactive coping, as its name suggests, is employed before the occurrence of stress in order to prevent it, or to diminish the potential stressors. Proactive coping implies perceiving difficult situations as being challenges rather than threats (Schwarzer & Taubert, 2002). The proactive person anticipates risks, accumulates resources and identifies or creates opportunities for personal development, in order to overcome obstacles and fulfill his or her potential. Thus, proactive coping shifts the view from risk management to goal management (Greenglass, 2002). Researches regarding proactive coping have uncovered that this type of coping is more efficient against stress than reactive coping, because it can prevent stress and can reduce its negative consequences (Aspinwall & Taylor, 1997; Carver & Connor-Smith, 2010).

Bode, de Ridder and Bensing (2006) created an intervention based upon proactive coping for middle aged adults in order to prepare them for aging. The purpose of this intervention was to teach participants the necessary competences, so as to be able to use proactive coping. The intervention had a practical approach, and was mainly focused on competences regarding goal setting and those involved in the pursuing of goals that were relevant to the participants. This intervention consisted of a training program with four sessions of two hours each. The first session tackled the importance of prevention and preparation. The second session was devoted to the subject of the early alarm signals, ways of identifying and coping with them. The third session approached the issue of positive future goals and how to choose the proper strategies to attain them. The fourth and last session taught participants how to elicit and use the feedback (Bode, de Ridder & Bensing, 2006). The intervention was a success: the participants improved their proactive coping competences significantly and reported that the training they received was useful and interesting. Consequently, the intervention was replicated, the results were similar and the effects still lasted three months after its completion (Bode, de Ridder, Kuijer & Bensing, 2007). Furthermore, the intervention was adapted for people diagnosed with type II diabetes and was extended over a period of 12 weeks. At the end, participants had developed proactive coping competences through which they...
managed to adopt healthy behaviors regarding their lifestyle. The effects remained significant nine months after the program ended (Thoolen, de Ridder, Bensing, Gorter & Rutten, 2009).

2. OBJECTIVE AND HYPOTHESES

2.1. Objective

The main objective of this study was to evaluate the efficacy of an intervention consisting of a proactive coping training program created for the support staff of Transilvania University of Brasov.

2.2. Hypotheses

It is expected that:
H1: Participants in the proactive coping training program will have higher scores in proactive coping compared to those who did not participate in the training program.
H2: There are differences regarding the proactive coping competences, in favor of the participants in the training program compared to the control group.
H3: At the end of the program, the participants who have taken part in it will report lower levels of job stress compared to the participants who were not included in the training program.
H4: Conscientiousness and neuroticism predict proactive coping.

3. METHOD

3.1. Design

For this study we used a quasi-experimental design with post-test only and two groups: an experimental group and a control group. The reason for choosing this design was that we could not select or distribute participants randomly across the two groups. Our participants were employees of Transilvania University who willingly signed up for the course. Moreover, we did not wish to pre-test our participants from the experimental group because the time interval between the pre-test and post-test would have been too short, and as such, the post-test results could have been influenced by the pre-test. Of course, the main disadvantage of this design type is that we cannot know for certain that the differences between groups are due to the intervention, or to the pre-existing differences between the two groups. Our results only show tendencies of the two groups, as we cannot point out where the changes have occurred or how much the experimental group has changed after the intervention (Moscovici, 1996).

3.2. Participants

The participants were 41 secretaries with a mean age of 45.07 ($SD = 7.79$) who work at Transilvania University of Brasov and who signed up willingly for the course. The experimental group was comprised of 24 people, while the control group was comprised of 17 people. Almost all of the participants were women, with the exception of one participant in the control group who was a man. The seniority ranges from 1 to 36 years with a mean of 14.7 years of service within the organization.

3.3. Procedure

We tested both groups using the same set of paper-and-pencil instruments. The participants in the experimental group filled in the instruments after the intervention and were also asked to rate each session of the training program on a seven point scale. The participants in the control group filled in the instruments on the same day as the participants in the experimental group. The intervention was divided into four sessions of three hours each and it lasted for two weeks. There were two sessions per week and a total of 12 hours of training. Two weeks after the intervention, we had a follow-up meeting with the participants in which we conducted two focus-groups, one with 8 participants and the other with 12 participants.

The training program consisted of four modules that approached the following subjects:
- Stress symptoms, causes of stress and stress management tools
- Personal resources in dealing with stress and time management
Communication styles and exercising assertiveness

The training program was designed to take into account the needs of the participants and the Experiential Learning Theory regarding adult learning (Kolb, Boyatzis, & Mainemelis, 2002). Thus, each session started with an ice-breaker exercise, followed by an activity with debriefing, then by a presentation and another activity in which to apply what they have learned. Every session was concluded with the evaluation of the participants’ satisfaction concerning the contents of that session.

3.4. Instruments

**Job Stress Survey** (Spielberger & Vagg, 2010) measures the general level and sources of occupational stress. The job stress index is obtained by combining the results for the frequency of 30 general sources of job stress and their perceived severity (intensity). The JSS describes 30 stressful situations for which the participants had to evaluate the frequency and severity. The instrument has three scales (Job Stress Index, Job Stress Frequency and Job Stress Severity), six subscales and a Cronbach’s Alpha coefficient that varies from .78 through .91.

**NEO-Five Factor Inventory** (Costa & McCrae, 2009) is a well-known instrument that measures the five dimensions of personality: Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. It has a total of 60 items measured on a 5 point Likert scale. Cronbach’s Alpha ranges from .73 to .82. We used the licensed Romanian versions of the NEO FFI and JSS.

**The Proactive Coping Inventory** (Greenglass, Schwarzer, Jakubiec, Fiskenbaum & Taubert, 1999) is a multidimensional instrument that measures coping. The PCI has 55 items, assessed on a 4 point Likert scale, and seven subscales (Proactive Coping, Reflective Coping, Strategic Planning, Preventive Coping, Instrumental Support Seeking, Emotional Support Seeking and Avoidance Coping). Cronbach’s Alpha is higher than .70 for all subscales.

**Utrecht Proactive Coping Competence Scale** (de Ridder, Thoolen & Bode, 2008) measures the proactive coping competences. This instrument has 21 items with a five-option Likert scale, and a Cronbach’s Alpha that ranges from .83 to .95.

4. RESULTS

The first three hypotheses stated that secretaries from the experimental group would have higher scores in proactive coping, proactive coping competences, and lower job stress scores than secretaries from the control group. Although there were less than 30 participants in each group, the variables were normally distributed, which made it possible to use the Independent samples t test, instead of Mann-Whitney’s U. The t test for independent samples showed no differences between the experimental and control group regarding proactive coping ($t_{(39)} = -1.02; p = .32$), proactive coping competences ($t_{(39)} = -.56; p = .58$) and job stress ($t_{(39)} = .88; p = .39$).

The last hypothesis stated that conscientiousness and neuroticism predict proactive coping. We computed a multiple regression in order to test this hypothesis and found that only conscientiousness predicts proactive coping.

<table>
<thead>
<tr>
<th>Model</th>
<th>Adjusted R²</th>
<th>F sig.</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) conscientiousness</td>
<td>.27</td>
<td>.001</td>
<td>4</td>
<td>.001</td>
</tr>
<tr>
<td>2) conscientiousness</td>
<td>.29</td>
<td>.001</td>
<td>3.30</td>
<td>.002</td>
</tr>
<tr>
<td>neuroticism</td>
<td>-1.44</td>
<td>.16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 1 we observe that, although both models are statistically significant, only conscientiousness has a significant contribution. Consequently, we prefer the first model, for which the regression equation is: 

$$
\text{proactive coping} = 20.76 + .62 \times \text{conscientiousness}.
$$

According to McLeod (2011) who argues that the assessment of an intervention ought to include the perceptions of targeted public, we conducted written anonymous assessments of the activities after each meeting. We measured participants’ satisfaction by asking them at the end of every session to evaluate how much they liked each session on a 7 point scale, where 1 represented ‘very little’ and 7 represented ‘very much’. The computed average grades of satisfaction were the following: 1st session – 6.65, the 2nd – 6.15, the 3rd – 6.8 and the 4th – 5.95. Consequently, the clients were highly satisfied with the course. Content analysis showed what participants liked best about each session: the interactive and relaxed manner of the presentations, the subjects
and the information they received, the fact that they worked in teams, the activities, they felt that the course addressed problems they were currently dealing with, and they also liked that they were able to learn new ways to deal with, and prevent stress. Participants also declared that they would have liked some aspects of the course to be more thoroughly discussed, or more time to be allotted to practicing some of the techniques. They also felt that at certain points they needed more individual attention from the trainer.

5. DISCUSSIONS

The main goal of this study was to evaluate the efficacy of an intervention that consisted of a proactive coping training program designed for university secretaries. After comparing the results of the two groups we have determined that there were no differences between the two, even though similar interventions yielded opposite results (Bode, de Ridder & Bensing, 2006; Bode, de Ridder, Kuijer & Bensing, 2007; Thoolen, de Ridder, Bensing, Gorster & Rutten, 2009; Kroese, Adriaanse, Vinkers, van de Schoot & de Ridder, 2014). One of the possible explanations for our findings could be that participants did not have enough time to apply what they have learned, and that the time was too short for any significant changes to take place, since the post-test occurred right after the ending of the intervention (this was also confirmed by the participants during the focus-groups). Another possible explanation for these results could be the absence of the pre-test which made it impossible to perform paired-samples comparisons. We can add other explanations, such as participants’ resistance to change, a diminished capacity to transfer knowledge into real-life situations because of various emotional factors, and last but not the least, the fact that most of the activities were performed in groups, and as such, individual particularities were rarely taken into account. The fourth hypothesis was partially confirmed, although other researchers (Hambrick & McCord, 2010; Carver & Connor-Smith, 2010) have found a medium to high positive correlation between proactive coping and conscientiousness, and a medium negative correlation between proactive coping and neuroticism. It seems that the personality profile of an individual who uses proactive coping includes high scores in conscientiousness and low scores in neuroticism.

The limitations of this study derive from the non-random distribution of participants in the experimental and control groups, the lack of pre-test, the possibility that the participants asserted high levels of stress because they were afraid they might be thought of as being uninvolved in their work should they declare otherwise. The interposition of other personality variables might also influence the results. Future studies with a random distribution of participants, or participants working in other fields, and with pretest and posttest can be developed.

6. ACKNOWLEDGEMENTS

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7. REFERENCES


