ATTACHMENT AND COPING STRATEGIES AS PREDICTORS OF MENTAL OVERLOAD AMONG MEMBERS OF THE SECURITY SERVICES OF THE CZECH REPUBLIC

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Abstract:
Aim: The aims of the present study are three-fold. Firstly, to investigate the use of different attachment and coping strategies among members of the security services of the Czech Republic, and explore the level of experienced mental overload. Secondly, to examine the relationship between the constructs employed in the study. In considering theoretical background and previous research (Janke & Erdmann, 2002; Johnstone & Feeney, 2015; Mikulincer & Shaver, 2012) we expect a negative relationship between positive coping strategies and experienced mental overload, but a positive association between negative coping strategies and experienced mental overload. Also, it is hypothesized that hyperactivation and deactivation will be positively related with mental overload. Thirdly, to explore the incremental validity of hyperactivation and deactivation strategies over and above demographics and coping strategies in predicting mental overload. The wider goal is to consider the potential utilization of attachment and coping strategies in selection procedures in members of the security services.

Method: The research includes members of four security services of the Czech Republic and the sample contained 130 respondents. The mean age of the sample is M = 39.22 years; SD = 9.07 in range of 21 to 64. The sample consisted of N = 83 female (M = 40.74, SD = 10.85), and N = 47 male (M = 38.36, SD = 7.82). Subjects included information about their level of education and the position in which they were employed. Whole teams were included from 4 security services with representatives from both types of positions; back offices as well as a direct duty performance.

Participants filled in measures for attachment strategies of hyperactivation and deactivation (EWR-I, Seifl, Seiflová & Střelec, 2017), positive and negative coping strategies (SVF-78, Janke & Erdmannová, 2003), and mental overload (Meister Questionnaire, Hladký & Žídková, 1999).

Results: Both attachment and coping strategies were averagely used by the subjects of our study, while the mental overload was somewhat lower than the norm. In particular, the T-scores were 43.41 (hyperactivation), 48.88 (deactivation), 57.80 (positive coping), 43.62 (negative coping), and 40.14 (mental overload). The results from the correlational analysis showed that hyperactivation, deactivation, and negative coping strategies were significantly positively related with experiencing mental overload, which is in line with the expectations. Contrary to our hypothesis, positive coping wasn’t significantly related with mental overload. Additionally, a negative association between positive coping and deactivation, and a positive relation among hyperactivation and negative coping showed to be significant.

Focusing on the categories of negative coping, it was found that the strategies of escape tendency (escape from stressful situations), perseveration (being unable to break off from one’s thoughts), and resignation (tendency to give up with feelings of helplessness or hopelessness) were significantly positively associated with mental overload. However, a
partial correlation between these strategies and mental overload, controlling for hyperactivation and deactivation, was not significant.
In the first step of the regression model the variables included: sex, age, education, and position; which explained 8% of the variance in experiencing mental overload. In the second step, negative coping was added, and significantly improved in prediction of mental overload, explaining 16% of the variance. The final step included hyperactivation and deactivation and there was a significant increment of \( \Delta R^2 = .24 \) over and above demographics and negative coping.
In the final model the variables of sex (\( \beta = .18, t = 2.08, p < .05 \)), education (\( \beta = .21, t = 2.57, p < .01 \)), hyperactivation (\( \beta = 19, t = 1.96, p < .05 \)), and deactivation (\( \beta = .25, t = 3.11, p < .01 \)) were significant predictors of mental overload.
Conclusion: Our study shows that the attachment strategies of hyperactivation and deactivation were superior predictors of mental overload. Individuals with insecure attachment (hyperactivating or deactivating) when coping with threats (Mikulincer & Shaver, 2012) are prone to experiencing mental overload. The results suggest that the construct of attachment strategies is more important in predicting workplace overload, compared to negative coping.
These findings are analyzed in the discussion and possibilities for further research are given. The main limitation of the study is the specificity of the sample.

Keywords:

Introduction
Mental load arises from all situations which stimulate cognitive, emotional, and other personality sources for adaptation response in an individual. Usually, the general stressors causing this results from completely new or unusual situations, qualitative and quantitative overload or interpersonal conflicts. It can also be a product of a limitation of certain factors for various periods, and these specific circumstances can fundamentally change the behavior of each individual (Bedrnová, Pauknerová, & Cejthamlová, 2015; Bowling & Jex, 2013). Overall, any stressor affecting an individual can be considered as a mental load. The key precondition of a perceived mental load is a subjective recognition of an objective stressor; because the extent of experiencing the mental load is highly influenced by individual differences. Although broad attention is paid to objective stressors, it is proposed that there should be a focus on individual differences which influence subjective perceiving of objective stressors. The individual differences, with an evidence-based ability to predict the extent of a perceived load, can be utilized in the selection process, which is especially meaningful in the security services (Bowling & Jex, 2013). Two constructs of individual differences, attachment in adulthood (Mikulincer & Shaver, 2007) and coping strategies (Janke & Erdmannová, 2003) were investigated in this field. Even though their association with experiencing a load seems to be clear, there are not enough conclusions to their interactions in predicting a currently perceived load.
The load itself is considered a neutral term, because both positive and negative effects are expected (see Bowling & Jex, 2013; McEwen & Lasley, 2002). In this meaning it is reasonable to point out a distinction between load in general, and negative load (strains) and stress. For example, Paulík (2017) defines stress as a specific case of a more generally conceived load. This is a situation where the experienced load level exceeds the acceptable level in terms of the adaptive ability of the organism under given conditions. The same is true for low load level, which cause the undermining of adaptive responses and also causes stress. Stressors resulting in negative load level or even stress affects overall well-being, and, moreover, are connected to mental and physical diseases (Bowling & Jex, 2013). Therefore, impacts of negative load are of reasonable interest to various psychology specialization, including organizational psychology. The aim of the current study is to investigate the use of different attachment and coping strategies among members of the security services of the Czech Republic, and explore the level of experienced mental overload. Additionally, to
investigate the exclusive roles as well as incremental validity of attachment strategies and coping strategies in predicting the currently perceived mental overload in members of the security services. The wider goal is to consider the potential utilization of attachment and coping strategies in the selection procedures for members of the security services.

**Theory**

Among the stressors considered as a source of workload are: role ambiguity and role conflict (e.g. Jackson & Schuler, 1985), role overload (Ortqvist & Wincent, 2006), responsibilities, job complexity (Podsakoff, LePine, & LePine, 2007), interpersonal conflicts and organizational constraints (Spector & Jex, 1998), and work-family conflicts (Greenhaus & Beutell, 1985). However, the above mentioned stressors can also be divided into challenge stressors and hindrance stressors; with only hindrance stressors leading to a negative load (Podsakoff et al., 2007). Apart from mental load, a physical, behavioral and biological load can also be recognized as a result (Bowlby & Jex, 2013; Hladký & Židková, 1999).

The intensity of the load can be assessed by subjective statements about perceived stress, by observing the influence on work behavior, and, last but not least, by measuring the physiological response of the organism. Another possible variant is a subjective evaluation of the load by means of questionnaires (Hodačová et al., 2007). One frequently used instrument for workload in the Czech Republic is the Meister questionnaire (see Hladký & Židková, 1999; Hodačová et al., 2007; Maroušková & Seitl, 2014). In the conceptualization of workload, Meister stresses that it is a psychological construct, or, in other words, it refers to the perceived workload. Consequently, it is a subjective response by individuals to objective working conditions. One of the dimensions of workload which is of interest to this study is mental overload, which exclusively refers to excessive levels of negative mental load.

Many previous studies have reported a relationship between attachment strategies and coping (e.g. Landen & Wang, 2010), experienced workload, stress, or its correlates (e.g. Hardy & Barkham, 1994; Hawkings, Howard, & Oyebode, 2007; Johnstone & Feeney, 2015; Lopez & Ramos, 2016; Možina, 2007; Towler & Stuhlmacher, 2013). Bowlby (1969) defines attachment as an innate behavioral system that is situationally activated when proximity needs to be increased when exposed to potential threat. Later, Mikulincer and Shaver (2003) used the conclusions drawn by Cassidy and Kobak (1988) and described the dynamics of the attachment system at adulthood. The attachment system is autonomously activated in situations perceived by the individual as potential or real threats with the goal to re-establish a feeling of safety. The primary strategies of the system focus on an imaginary or real proximity in the seeking of an important other. If the primary strategies are successful and feeling of safety is renewed, the system is naturally deactivated. If the primary strategies fail, two types of secondary strategies are employed, based on the previous, mainly emotional, experience in proximity seeking. In the first option, individuals tend to believe that strengthened activities leading to closeness with others can restate feelings of safety. Therefore, these individuals use hyperactivation strategies resulting in exaggerated activation of the system. In the second option, individuals tend to believe that besides other threats, other people are mainly threats, and it is necessary to face threats without them. These individuals use deactivation strategies that lead to a deactivated attachment system. Repeating positive experience with one of the mentioned strategies type constitutes a stable pattern (style) of reaction towards threatening situations, and which is considered to be a personality trait. The primary strategies underlay secure attachment, the hyperactivation secondary strategies underlay insecure anxious
Attachment and deactivation secondary strategies underlay insecure avoidant attachment. For the current study, we especially highlight that each type of strategies is expressed via a variety of feelings, experiencing and behaviors that are specific for individuals. However, each type of strategies shares the relational goal in particular – the primary strategies focus on proximity seeking in a situation of threat, the hyperactivation secondary strategies focus on proximity seeking, and stable proximity maintenance and deactivation secondary strategies focus on proximity avoidance. Although each of the named goals can be fulfilled with varieties of expressions, research has brought evidence that secure attachment is connected with expressions leading to lower level load and to positive coping, while insecure patterns of attachment are connected to the opposite (for a comprehensive general overview see Mikulincer & Shaver 2007, 2016; for a field specific overview see Harms, 2011; Yip, Ehrhardt, Black, & Walker, 2018).

Another important predictor of successful/unsuccessful dealing with stressful situations is the construct of coping strategies. Paulík (2017) defines coping strategies as a choice of procedures that are more influenced by the situation and take into account the conditions. “When dealing with serious life events and difficult situations, the individual chooses individual strategies aimed at adapting to change and “minimizing” its undesirable impact on human health” (Pelčák, 2013, 67).

Lazarus and Folkman (1984) originally proposed two categories of coping strategies, problem-focused and emotion-focused. Another widely accepted distinction is the one proposed by Janke and Erdmann (2002), which differentiates between positive (adaptive) and negative (maladaptive) coping strategies. Positive and negative coping are broad categories which refer to habitual ways of reacting to stressors. Positive strategies comprise underestimation, guilt denial, diversion, alternative satisfaction, situation control, reaction control, and positive self-instruction, while negative coping subcategories are escape tendency, perseveration, resignation, and self-accusation. Among the named strategies there is also Lazarus and Folkman’s distinction, which allows both for a focus on a positive-negative dimension as well as a problem-emotion dimension. Using positive strategies leads to stress reduction, while using negative strategies is associated with behaviors that do not reduce stress, and can even increase it. The relation of coping strategies to the attachment at adulthood is not definitely clear when regarding their impact on load. Attachment at adulthood proposes an explanation for experiencing, and behavioral strategies under given stressors via personality. The theory of coping strategies describes experiencing and behavioral strategies that are learned by individuals and applied under given stressors. Although some overlap can be hypothesized, we will consider both constructs independently, and as a conclusion we state the following hypotheses:

H1: Hyperactivation strategies are associated with mental overload in a positive direction.

H2: Deactivation strategies are associated with mental overload in a positive direction.

H3: Positive coping strategies are associated with mental overload in a negative direction.

H4: Negative coping strategies are associated with mental overload in a positive direction.

H5: Attachment secondary strategies and coping strategies are both mutually independent predictors of mental overload.
Method

Participants
The study is based on $N = 130$ participants recruited from four security services in the Czech Republic. The mean age of the sample is $M = 39.22$ years; $SD = 9.07$ in the range of 21 to 64. The sample consisted of $N = 83$ female ($M = 40.74$, $SD = 10.85$), and $N = 47$ male ($M = 38.36$, $SD = 7.82$). Regarding their work position, $43.1\%$ of the participants are employed in the back office, while $56.9\%$ is in direct performance duty. The distribution of the education level in this sample is: $32.3\%$ graduated from high school, $1.5\%$ graduated from college, $24.6\%$ graduated from university as bachelors, and $41.5\%$ graduated from university with a master’s degree.

Procedure
All 7 security services of the Czech Republic were asked for cooperation in the research. The stated requirement was the participation of whole work teams. We applied this requirement to minimize the risk of participation by the respondents with only tendencies to primary and hyperactivation secondary strategies. Whole teams were gained from 4 security services with representatives from both types of positions, back offices as well as a direct performance duty. All data was gained from respondents via paper-pencil instruments during one time-period from July 2018 to January 2019.

Instruments
Experiences in Work Relationships Individual (EWR-I) is a self-report scale originally developed for the measurement of hyperactivation and deactivation secondary strategies at work (Seitl, Seitlová & Střelec, 2017). The aim in the formulation of items was an indirect measure of relationship avoidance and anxiety through their expression in work behavior, which is potentially more acceptable for employees. The two orthogonally oriented sub-scales dedicated to hyperactivation and deactivation strategies contain items describing the behavioral manifestations observable for the given secondary strategies in a work environment; the other items describe a respondent’s feelings towards co-workers without observable behavior. Each item is rated on a 7-point Likert scale (agree-disagree) as is usual in questionnaires for self-report of attachment strategies. For the current study, we used a 19-items version, standardized on a sample of 575 employees. Coefficients of internal consistency $\alpha$ were .79 for deactivation strategies and .81 for hyperactivation strategies. Criterion validity was successfully verified with ECR-CZ (Seitl, Charvát, & Lečbych, 2016).

SVF-78 (Janke & Erdmannová, 2003) is a self-report questionnaire focusing on 13 general coping strategies. Respondents answer 78 items divided into 13 sub-scales representing 13 strategies. Each item is defined as type reacting and is rated by respondents on a 5-point Likert scale according to the probability described when reacting in stressful situations. Results offer a profile of preferred strategies in coping and allows a comparison with norms from different countries. According to their concept, the authors labeled the first 7 strategies as positive coping, which should lead to stress reduction, and the last 4 strategies as negative coping, which do not reduce stress and can even increase it. Two coping strategies, the need for social support and active avoidance, are ordered neither under positive nor negative strategies. Coefficients of internal consistency $\alpha$ were ranking between .77 and .94 for individual sub-scales. However, data for Czech norms was gained from a quite small sample $N = 246$. 
In particular, Hladký and Židková (1999) introduced the Meister Questionnaire of Mental Load to Czech psychological research and practice. The questionnaire consists of 10 items that saturate three factors: mental overload, monotony and nonspecific factor. Each item is rated on a 5-point Likert scale (agree-disagree). Results can be interpreted for each factor independently or for the overall mental load at a group as well as an individual level. Norms, divided according to gender were gained from a sample of 1,527 working respondents. For use in practice, a psychologist can rank the raw score of an individual to one of three ranges, which express the severity of load or can check if the stated critical cut-off was exceeded. In the case of research, it seems to be more useful to transfer individual raw scores to standardized scores. Convergent construct validity was successfully verified via high correlation to state-trait neuroticism and correlation to employee well-being (Hladký & Židková, 1999; Maroušková & Seitl, 2014). We worked with the first factor in the current study. Items of this factor follow the subjective perception of negative level stressors in role overload, responsibility, and conflict.

Results

Descriptive statistics
The descriptive statistics (mean, standard deviation, skewness and kurtosis) were calculated for all of the measures used in the study (EWR-I, SVF-78, and the mental overload factor of the Meister questionnaire). Furthermore, Cronbach’s alpha scores were conducted for reliability analysis (see Table 1).

Table 1: Descriptive statistics, and reliability for the scales of the study

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>Sk</th>
<th>K</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWR-I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyperactivation</td>
<td>3.93</td>
<td>0.87</td>
<td>0.08</td>
<td>-0.40</td>
<td>.77</td>
</tr>
<tr>
<td>Deactivation</td>
<td>3.14</td>
<td>0.82</td>
<td>0.63</td>
<td>0.59</td>
<td>.78</td>
</tr>
<tr>
<td>SVF-87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POS</td>
<td>14.03</td>
<td>1.93</td>
<td>-0.76</td>
<td>1.10</td>
<td>.61</td>
</tr>
<tr>
<td>NEG</td>
<td>8.06</td>
<td>2.79</td>
<td>0.47</td>
<td>0.17</td>
<td>.75</td>
</tr>
<tr>
<td>MQ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental overload</td>
<td>6.80</td>
<td>2.43</td>
<td>0.45</td>
<td>-0.49</td>
<td>.71</td>
</tr>
</tbody>
</table>

Note. EWR-I = Experiences in Work Relationships – Individual; SVF-78 = Stress Coping Style Questionnaire; POS = Positive coping strategies; NEG = Negative coping strategies; MQ = Meister Questionnaire.

Table 1 shows that internal consistencies were satisfied, apart from the low Cronbach alpha score (α = .61) for positive coping. The scales used in the study are normally distributed, as indicated by the skewness and kurtosis, with the exception of positive coping which has a slightly peaked distribution. The T-scores for all of the constructs used in the study are given in Table 2.
Table 2: Mean scores and standard deviations for the EWR-I, SVF-78, and the mental overload factor of the Meister questionnaire

<table>
<thead>
<tr>
<th>Scales</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EWR-I</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyperactivation</td>
<td>43.41</td>
<td>13.35</td>
</tr>
<tr>
<td>Deactivation</td>
<td>48.88</td>
<td>8.93</td>
</tr>
<tr>
<td><strong>SVF-87</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underestimation</td>
<td>58.01</td>
<td>9.37</td>
</tr>
<tr>
<td>Guilt denial</td>
<td>51.99</td>
<td>7.62</td>
</tr>
<tr>
<td>Diversion</td>
<td>54.63</td>
<td>8.89</td>
</tr>
<tr>
<td>Alternative satisfaction</td>
<td>52.88</td>
<td>8.09</td>
</tr>
<tr>
<td>Situation control</td>
<td>50.88</td>
<td>9.39</td>
</tr>
<tr>
<td>Reaction control</td>
<td>51.88</td>
<td>7.94</td>
</tr>
<tr>
<td>Positive self-instruction</td>
<td>50.68</td>
<td>9.50</td>
</tr>
<tr>
<td><strong>Need for social support</strong></td>
<td>50.43</td>
<td>8.37</td>
</tr>
<tr>
<td>Using of positive coping</td>
<td>57.80</td>
<td>8.27</td>
</tr>
<tr>
<td><strong>Active avoidance</strong></td>
<td>53.71</td>
<td>8.90</td>
</tr>
<tr>
<td>Escape tendency</td>
<td>49.31</td>
<td>6.64</td>
</tr>
<tr>
<td>Perseveration</td>
<td>40.88</td>
<td>8.59</td>
</tr>
<tr>
<td>Resignation</td>
<td>45.97</td>
<td>7.01</td>
</tr>
<tr>
<td>Self-accusation</td>
<td>43.86</td>
<td>7.99</td>
</tr>
<tr>
<td>Using of negative coping</td>
<td>43.62</td>
<td>7.20</td>
</tr>
<tr>
<td><strong>MQ</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental overload</td>
<td>40.14</td>
<td>8.24</td>
</tr>
</tbody>
</table>

Note. The strategies of need for social support and active avoidance are not classified as positive or negative; EWR-I = Experiences in Work Relationships – Individual; SVF-78 = Stress Coping Style Questionnaire; MQ = Meister Questionnaire.

Table 2 shows that hyperactivation and deactivation strategies were slightly lower than the norm, but still averagely used by the participants. Regarding the coping strategies, the T-scores for using positive coping and negative coping indicate an average use of both strategies, since they all are between 40 – 60. However, using positive coping is higher than negative coping. Focusing on specific positive coping strategies, the strategy underestimation was mostly used. Situation control and positive self-instruction were used less often. The negative strategy of escape tendency was mostly used, but the strategy perseveration was less frequently used by the participants. Nevertheless, all of the specific strategies T-scores are within the average range. Finally, participants reported a somewhat lower mental overload.

**Intercorrelations**

The relationships between the variables are depicted in Table 3.

Table 3: Intercorrelations between the constructs

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hyperactivation</td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Deactivation</td>
<td></td>
<td>-.03</td>
<td>-.31**</td>
<td></td>
</tr>
<tr>
<td>3. POS</td>
<td>.54**</td>
<td>.21*</td>
<td>-.02</td>
<td></td>
</tr>
<tr>
<td>4. NEG</td>
<td></td>
<td>.28**</td>
<td>.28**</td>
<td>-.10</td>
</tr>
<tr>
<td>5. Mental overload</td>
<td>.28**</td>
<td>.28**</td>
<td>-.10</td>
<td>.27**</td>
</tr>
</tbody>
</table>

Note. POS = Positive coping strategies; NEG = Negative coping strategies; *p < .05; **p < .01
As expected, hyperactivation and deactivation strategies were positively related with mental overload. These results support hypotheses 1 and 2. Regarding the coping strategies, surprisingly only negative coping was significantly related with mental overload. Unlike H4, hypothesis 3 was not supported in analysis result. Hyperactivation and deactivation strategies weren’t related, as positive and negative coping, which is in line with their theoretical conception as orthogonal constructs. There is a negative association between positive coping and deactivation strategies, and a positive relation among hyperactivation and negative coping.

We then focused on individual negative coping strategies and their relation to mental overload. The results are given in Table 4.

**Table 4: Correlations between negative coping strategies and mental overload**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mental overload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative coping strategies</td>
<td></td>
</tr>
<tr>
<td>Escape tendency</td>
<td>.19*</td>
</tr>
<tr>
<td>Preservation</td>
<td>.22*</td>
</tr>
<tr>
<td>Resignation</td>
<td>.31**</td>
</tr>
<tr>
<td>Self-accusation</td>
<td>.12</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01

As indicated by Table 4, only the strategy of self-accusation was not significantly related with experience of mental overload.

Furthermore, we have calculated partial correlations between the individual negative coping strategies and mental overload, controlled for hyperactivation and deactivation. In this case, none of the individual negative strategies was significantly related with mental overload.

Finally, as the coping strategies of active avoidance and need for social support are not classified as positive or negative, we explored the relation between these two strategies and mental overload. The zero-ordered correlations between active avoidance and mental overload was not significant (r = .02; p > .05), as the correlation between need for social support and mental overload (r = .12; p > .05).

**Regression analysis**

A hierarchical regression was performed in order to explore the incremental validity of hyperactivation and deactivation in predicting experience of mental overload. In the first step were entered: sex, age, education, and position. Then, negative coping strategies were entered in the second step. Finally, hyperactivation and deactivation strategies were included in the third step. The results are shown in Table 5.
The results from Table 5 shows that hyperactivation and deactivation strategies accounted for a significant additional degree of variance in experiencing mental overload over and above the demographic variables and negative coping strategies ($\Delta R^2 = .24$). The addition of the attachment dimensions in model 3 resulted in an overall significant prediction equation, $F(7,122) = 5.43, p < .001$. It was found that sex ($\beta = .18$, $t = 2.08$, $p < .05$), education ($\beta = .21$, $t = 2.57$, $p < .01$), hyperactivation ($\beta = .19$, $t = 1.96$, $p < .05$), and deactivation ($\beta = .25$, $t = 3.11$, $p < .01$) were significant predictors of experiencing mental overload. Multicolinearity was not a problem, since all of the tolerance values were above 0.10, and all the VIF values were below 10. The assumption of normality was met, as assessed by a Q-Q plot.

Discussion

The first aim of the present study was to explore the use of different attachment and coping strategies among members of the security services of the Czech Republic, and explore the level of experienced mental overload. Following this, our focus was on investigating exclusive roles as well as the incremental validity of attachment strategies and coping strategies in predicting currently perceived mental overload in members of the security services. The wider goal was to consider the potential utilization of attachment and coping strategies in selection procedures in members of the security services. First, we will discuss the findings from the descriptive analysis, then we will focus on the correlational data, and finally, results from the hierarchical regression analysis will be interpreted. The possibilities for future research and limitations of the study will be considered, as well.

From the descriptive analysis it can be concluded that both attachment and coping strategies were averagely used by the subjects of our study, while the mental overload was somewhat lower than the norm. This indicates that the sample of security services are within the satisfactory range on all
of the investigated variables. More importantly, the use of positive coping was higher than the use of negative coping, although still within the range of average use. However, it should be pointed out that the scale of positive coping had a low internal consistency ($\alpha = .61$) in this study. The most widely used specific positive coping strategy was underestimation, which refers to comparing with others to attribute less stress. While the most frequent negative strategy among the subjects was escape tendency (escape from stressful situations).

From the zero-order correlations we have found support for H1 and H2, in that both attachment strategies are related with experiencing mental overload. Thus, individuals using either hyperactivation or deactivation strategies are prone to experience mental overload in the workplace more than individuals preferring primary strategies. This is in line with previous findings which show that low levels of adult attachment security are associated with higher levels of job stress and burnout (Leiter, Day, & Price, 2015; Lopez & Ramos, 2015). We then found that negative coping strategies were positively related to mental overload, and H4 received its support via this result. This finding suggests that relying on maladaptive coping strategies could contribute to mental overload, which is in agreement with the propositions by Janke and Erdmann (2002). Focusing on subcategories of negative strategies, three of them (escape tendency, perseveration, and resignation) were significantly related with mental overload. Escape tendency is characterized by escape from stressful situations, perseveration refers to being unable to break off from one’s thoughts, while resignation is a tendency to give up with feelings of helplessness or hopelessness. All negative strategies are considered to increase stress, rather than decreasing it (Janke & Erdmann, 2002). Our findings support this view, and suggest that individuals in the security services who rely on these maladaptive strategies tend to negatively perceive working conditions, or experience mental overload. It could be argued that the tendency to use negative coping strategies will also relate with worse performance, as well. One study supports this notion, and has shown that a higher use of negative coping strategies is related with lower performance in a sample of novices in a surgery (Hasan et al., 2006).

Since hyperactivation and deactivation strategies were both related with negative coping strategies, partial correlations were computed for the association between negative coping strategies and mental overload, controlling for attachment strategies. In this case, the associations between specific negative coping strategies and mental overload, were not significant, indicating the relevance of attachment strategies. Finally, contrary to our expectations and H3, positive coping strategies were not negatively related with mental overload. This will be argued further below.

The final model from the hierarchical regression showed that sex (being male), education and both attachment strategies are relevant predictors of experiencing mental overload. Regarding the gender roles, Paulík (2012) state that many studies confirm that gender roles are linked to experiencing stress and choosing appropriate coping strategies, especially in the work environment. Previous investigations reported differences in dealing with stress situations between men and women (Billings & Moss, 1981; Ptacek, Smith, & Zanas, 1992), and their findings correspond with our results. Another relevant demographic variable in predicting mental overload, was predicated on the level of education. An unexpected finding was that higher education was a predictor of mental overload. This is contrary to previous findings which report that lower education is related with higher levels of work stress in a broad sample of different European countries (Lunau, Siegrist, Dragano, & Wahrendorf, 2015). Our results might indicate that the work in security services is more demanding for the individuals with higher education. The higher demands may be connected with a higher level of responsibilities, which are one of the relevant stressors. In that sense, the
subjective experience of quantitative and qualitative workload reflects the quantity and difficulty of tasks these individuals have.

Furthermore, it was found that attachment strategies are a superior predictor of mental overload, showing incremental validity with regard to demographics and negative coping strategies. Interestingly, negative coping strategies were not a significant predictor in the final model with the conclusion that H5 was not supported. These results might suggest that negative coping strategies are a specific type of behaviors expanding from the broader construct of attachment strategies. Another possible explanation is that negative coping strategies are a mechanism explaining the association between attachment strategies and mental overload. It is postulated that high attachment avoidance or anxiety is related with using maladaptive coping strategies, and this is related with high levels of distress (Lopez et al., 2001). Additionally, Landen and Wang (2010) have shown that coping was a partial mediator between attachment avoidance and psychological well-being. In that sense, future studies might explore the mediation effect of negative coping strategies on the use of the attachment strategies-mental overload link.

In all cases, we gained some evidence that attachment secondary strategies can be considered a useful construct in the selection procedures of members of the security services. Moreover, attachment secondary strategies allow accepting the paradigm of a positive check of selection predictors. From the perspective of attachment theory, the absence of the attachment secondary strategies is increasing the potential for primary strategies that are connected to a lower level of a perceived load. Results for coping strategies are more ambiguous in relation to selection procedures in two ways. Firstly, we have to take into account that we worked with employees instead of applicants. The association between positive coping and load level does not have to be linear in the general population of applicants, which is not possible to analyze in our case because respondents with lower positive strategies and a higher mental overload were probably eliminated via the existing selection procedures. Levels of mental overload were lower than the population mean and levels of positive coping strategies were higher than the population mean in our sample. Secondly, it is reasonable to work also with the option that positive coping strategies have an impact more on solving stressors than their perceptions. In this case, positive coping strategies can be a predictor or mediator of negative outcomes of mental overload such as burnout syndrome, turnover or physical illness rooted in stress. The moderating effect of coping strategies between objective stressors and negative outcomes was already identified (Haar, 2015). Our results for negative coping strategies are clearer. However, the utilization of negative coping strategies would mean accepting the paradigm of a negative check of selection predictors, which is ethically problematic. The risk of false results is higher than the gain from the elimination of applicants with very high negative coping strategies.

The addition of other relevant variables is a further avenue for future research. One good example would be the character strengths construct (Peterson & Seligman, 2004), which indicates how individuals cope with adversity. One previous study (Harzer & Ruch, 2015) showed that interpersonal and intellectual character strengths were negatively associated with negative coping. Interpersonal strengths refer to kindness, leadership, teamwork, creativity, curiosity, and love of learning. Including these strengths in future studies could contribute to an elaboration of the nomological network of attachment strategies in regard to mental overload, or stress, in general.

The main limitation of this study is the specificity of the sample used and uneven representation of the security services in the sample. In this respect, generalizability of the findings is limited. Additionally, in future research larger and more diverse samples should be utilized and there should be less reliance on self-reports.
References


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