Employees’ personality traits and needs’ frustration predicts stress overload during the COVID-19 pandemic

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This study aimed at identifying significant associations between stress, personality traits, and basic psychological needs’ satisfaction and frustration. In the study, a simple random sample consisted of 245 employees (mean age = 39.6; SD = 10.82). 138 (57.5%) employees worked in the public sector, and 102 (42.5%) employees worked in the private sector. This study found no statistically significant differences between the private and public sector employees in the stress overload. Private sector employees demonstrated higher autonomy and relatedness satisfaction, while public sector employees demonstrated higher autonomy frustration. Public sector employees demonstrated higher scores on agreeableness and conscientiousness, but no significant differences between public and private sectors were found comparing the scores on extraversion, neuroticism, and open-mindedness. The SEM identified some significant associations between neuroticism, unsatisfied needs, and stress overload; conscientiousness, unsatisfied needs, and stress overload; basic psychological needs’ satisfaction and four personality traits, namely, extraversion, agreeableness, conscientiousness, and open-mindedness.

Key words: Psychological needs, stress, public sector, private sector.

INTRODUCTION

Ensuring the right of citizens to good administration depends on the work efficiency of civil servants. Research indicates that work efficiency in the public sector depends not only on process management but also on employees’ psychological well-being. Some studies found that the impact of the COVID-19 pandemic on the psychological well-being of civil servants is disadvantageous, as excessive stress can significantly reduce work efficiency. Research demonstrated that during the pandemic, there was a statistically significant increase in the rates of anxiety and depression (Lawrence, Garcia, Stewart, & Rodriguez, 2021), stress (Chadee, Ren, & Tang, 2021; Kanzler & Ogbeide, 2020; Yan et al., 2021), insomnia, or poor sleep quality (Ahmed, Hossain, Siddique, & Jobe, 2021; Başkan & Güneş, 2021), burnout (Afulani et al., 2021), chronic fatigue, and poor psychological well-being (Escudero-Castillo, Mato-Díaz, & Rodriguez-Alvarez, 2021).

Both quarantine work and return to routine work are accompanied by pressures, adjustment difficulties, painful emotional reactions, and decreased motivation. Research indicates that the psychological difficulties experienced by employees during a pandemic relate to a variety of variables, including personality traits, as neurotic individuals were found to be less confident in their work efficacy under altered conditions (Liu, Lithopoulos, Zhang, Garcia-Barrera, & Rhodes, 2021). A study of public sector employees who started working from home for the first time due to the pandemic found that organized, careful, and disciplined employees experienced less work-life conflict, while anxious and insecure employees experienced higher work-family conflict (Şener & Abunasser, 2020). It was also found that those who worked at home demonstrated worse psychological well-being than those who worked in the workplace (Escudero-Castillo et al., 2021).

Employees working from home were also characterized by increased levels of stress, less physical activity, and more sedentary behavior on non-working days (Barone Gibbs, Kline, Huber, Paley, & Perera, 2021). In addition, workers working from home spent significantly more time communicating remotely and on screens (Savić, 2020). Work from home was found to be productive and unobtrusive for work-life balance for individuals with excellent self-leadership skills (Galanti, Guidetti, Mazzei, Zappalà, & Toscano, 2021). On the other hand, some studies have shown that working from home can negatively affect self-control and more quickly lead to the risk of burnout (Chadee et al., 2021; Chernenko et al., 2021). Appreciation and emotional support during the COVID-19 pandemic were also associated with less stress and burnout (Afulani et al., 2021; Ștefănuț, Vințilă, Bucur, & Blaboli, 2021). Studies of gender differences in the public sector have shown that working mothers have experienced stress due to altered working conditions and anxiety about not becoming infected with coronavirus (Hibel, Boyer, Buhler-Wassmann, & Shaw, 2021). A study in Spain found that quarantine had a more substantial negative impact on women’s subjective well-being than on men, which is related to differences in gender roles in families (Escudero-Castillo et al., 2021).

While comparing the mental health and well-being of private and public sector employees, it was found that well-being levels depended on the specific type of organization and organizational culture (Ryu & Bae, 2020). An analysis of the literature on stress experienced by public and private sector employees revealed...
diverse data. For example, one study found that public sector employees were more stressed than private-sector employees (Chegini, 2019), but another study demonstrated that private-sector employees were more stressed than public sector employees (Subramanian & Kruthika, 2012). Big Five personality domains have been extensively analyzed applying the NEO personality inventory (Costa & McCrae, 1995) or the Big Five Inventory-2 (Soto & John, 2017) in various contexts, including work, education, or sports. For example, research demonstrated that neuroticism is related to diminished employees’ self-efficacy during the pandemic (Liu et al., 2021) and higher work–family conflict (Sener & Abunasser, 2020), while conscientiousness is related to employees’ better self-regulation and work-life balance.

This study aimed at identifying significant associations between personality traits, basic psychological needs satisfaction and frustration, and stress overload. It was hypothesized that public sector employees would demonstrate lower scores on basic psychological needs’ satisfaction, higher stress overload, but their personality traits would not differ significantly from private sector employees’ personality traits. It was also hypothesized that neuroticism and basic psychological needs’ frustration predict higher stress overload during the COVID-19 pandemic.

MATERIALS AND METHODS

In this study, a simple random sample consisted of 245 employees. Their age ranged from 21 to 64 years (Mean = 39.6; SD = 10.82), and 67% of the respondents were females. 138 (57.5%) employees worked in the public sector, and 102 (42.5%) employees worked in the private sector. The majority of respondents hold Master (55.8%) or Bachelor (32.9%) degree, some (4.2%) hold Doctoral degree. Most of the participants indicated that during the pandemic they work remotely (48.3%) or their work is mixed (29.6%), but some respondents reported that they work at the workplace (21.3%).

The procedure was administered online and followed the General Data Protection Regulation (GDPR) guidelines and the requirements of the Helsinki Declaration. This study applied three instruments, the translated Lithuanian version of the Big Five Inventory-2 (Soto & John, 2017), the translated Lithuanian version of the Short Stress Overload Scale (SOS-S) (Amirkhan, 2018), and the translated Lithuanian version of the Basic Psychological Needs Satisfaction and Frustration Scale (BPNSFS).

Personality traits were measured by the Big Five Inventory-2 (BFI-2), which uses 60 items to hierarchically assess the Big Five personality domains and 15 more-specific facet traits (Soto & John, 2017). Stress level was measured by a 10-item SOS-S (Amirkhan, 2018), in which the event load subscale evaluated perceived environmental demands, and the personal vulnerability subscale assessed perceived inadequacy to environmental demands. Participants were asked how they felt in the past week and were expected to rate statements using a 5-point Likert scale ranging from “not at all” to “a lot.”

Needs satisfaction and frustration were measured by the Basic Psychological Needs Satisfaction and Frustration Scale (Chen et al., 2015), which contains 24 items assessing three needs satisfaction subscales: Autonomy Satisfaction (4 items, e.g., “I feel that my choices express who I really am”), Competence Satisfaction (4 items, e.g., “I feel capable at what I do”), and Relatedness Satisfaction (4 items, e.g., “I feel that others care about me”). Three needs frustration subscales: Autonomy Frustration (4 items, e.g., “I feel forced to do many things I wouldn’t choose to do”), Competence Frustration (4 items, e.g., “I feel like a failure because of the mistakes I make”), and Relatedness Frustration (4 items, e.g., “I feel the relationships I have are just superficial”). Respondents registered their responses on a 5-point Likert scale ranging from “completely disagree” to “completely agree.”

RESULTS

Means, standard deviations, and correlations between the BFI-2 subscales in this study are reported in Table 2.

Means, standard deviations, and correlations between the BPNSFS subscales in this study are reported in Table 3.

Means, standard deviations, and correlations between the SOS-S subscales in this study are reported in Table 4.

Comparative Mann–Whitney U analysis of public and private sector employees’ stress overload revealed no significant differences between the sectors. However, private sector employees demonstrated higher Autonomy satisfaction ($U = 5142.000; z = −3.359; p < 0.001$). Relatedness satisfaction ($U = 5542.500; p < 0.001$).

| Scales and subscales | Cronbach alpha |
|----------------------|---------------|
| BFI-2                | 0.80          |
| Extraversion         | 0.80          |
| Agreeableness        | 0.79          |
| Conscientiousness    | 0.78          |
| Neuroticism          | 0.85          |
| Open-mindedness      | 0.79          |
| SOS-S                | 0.87          |
| Personal vulnerability| 0.88          |
| Event load           | 0.86          |
| BPNSFS               | 0.78          |
| Autonomy satisfaction| 0.76          |
| Autonomy frustration | 0.78          |
| Relatedness satisfaction | 0.73 |
| Relatedness frustration | 0.75 |
| Competence satisfaction | 0.83 |
| Competence frustration | 0.83 |

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A signifi-
cantly to the model and were signi-
ificant predictors of stress: event load.

Additionally, the authors conducted a multiple linear regression using personal vulnerability as the criterion and basic psychological needs, and stress overload as predictors (Table 8). A significant regression equation was found (F [2.239] = 73.896; p < 0.001), with an R² = 0.404. Predicted personal vulnerability was equal to 0.245 + 0.195 (Autonomy frustration) plus 0.677 (Competence frustration) points. Personal vulnerability increased 0.677 points for each Competence frustration point. Both Autonomy frustration (B = 0.530; p < 0.001) and Competence frustration (B = 0.530; p < 0.001) contributed significantly to the model and were significant predictors of personal vulnerability.

Likewise, the authors conducted a multiple linear regression using personal vulnerability as the criterion and basic psychological needs’ satisfaction and frustration as predictors (Table 8). A significant regression equation was found (F [2.239] = 73.896; p < 0.001), with an R² = 0.404. Predicted personal vulnerability was equal to 0.245 + 0.195 (Autonomy frustration) plus 0.677 (Competence frustration) points. Personal vulnerability increased 0.677 points for each Competence frustration point. Both Autonomy frustration (B = 0.530; p < 0.001) and Competence frustration (B = 0.530; p < 0.001) contributed significantly to the model and were significant predictors of personal vulnerability.

Furthermore, the authors applied the SEM and created a model on associations between neuroticism, unsatisfied needs, and stress overload (Fig. 1). Findings revealed that the fit of the model with the correlated errors was good, X² = 22.909; df = 19; Normed Fit Index (NFI) = 0.975; Tucker-Lewis Index (TLI) = 0.990;

\[ z = -2.212; \quad p = 0.027, \]  
\[ z = -2.033; \quad p = 0.042, \]  
\[ z = -1.962; \quad p = 0.050. \]

Independent samples’ T test indicated that public sector employees demonstrated higher Autonomy frustration (U = 5909.000; z = -1.962; p = 0.050). Independent samples' T test indicated that public sector employees demonstrated higher scores on Agreeableness (t [233] = 2.214; p = 0.028) and Conscientiousness (t [235] = 2.511; p = 0.013), but no significant differences between public and private sectors were found comparing the scores on Extraversion, Neuroticism, and Open-Mindedness.

Furthermore, the authors conducted a multiple linear regression using event load as the criterion and basic psychological needs satisfaction and frustration as predictors (Table 5). A significant regression equation was found (F [2.239] = 23.216; p < 0.001), with an R² = 0.166. Predicted event load was equal to 2.604 + 0.573 (Neuroticism) plus −0.347 (Conscientiousness) points. Event load increased 0.573 points for each Neuroticism point. Both Neuroticism (B = 0.530; p < 0.001) and Conscientiousness (B = −0.347; p = 0.006) contributed significantly to the model and were significant predictors of stress: event load.

Also, the authors conducted a multiple linear regression using event load as the criterion and basic psychological needs satisfaction and frustration as predictors (Table 6). A significant regression equation was found (F [2.239] = 53.841; p < 0.001), with an R² = 0.330. Predicted event load was equal to 0.663 + 0.530 (Autonomy frustration) plus 0.530 (Competence frustration) points. Event load increased 0.530 points for each Autonomy/Competence frustration point. Both Autonomy frustration (B = 0.530; p < 0.001) and Competence frustration (B = 0.530; p < 0.001) contributed significantly to the model and were significant predictors of stress: event load.

Moreover, the authors conducted a multiple regression using personal vulnerability as the criterion and basic psychological needs’ satisfaction and frustration as predictors (Table 7). A significant regression equation was found (F [2.239] = 47.726; p < 0.001), with an R² = 0.292. Predicted personal vulnerability was equal to 1.378 + 0.723 (Neuroticism) plus −0.307 (Conscientiousness) points. Personal vulnerability increased 0.723 points for each Neuroticism point. Both Neuroticism (B = 0.723; p < 0.001) and Conscientiousness (B = −0.307; p = 0.003) contributed significantly to the model and were significant predictors of personal vulnerability.

### Table 2. BFI-2: descriptive statistics and correlations between the subscales

| BFI-2 subscales       | M    | SD  | Extraversion | Agreeableness | Conscientiousness | Neuroticism |
|-----------------------|------|-----|--------------|---------------|-------------------|-------------|
| Extraversion          | 3.35 | 0.55| 1            |               |                   |             |
| Agreeableness         | 3.65 | 0.50| 0.749        | 1             |                   |             |
| Conscientiousness     | 3.59 | 0.49| 0.273**      | 0.223**       | 1                 |             |
| Neuroticism           | 2.91 | 0.59| -0.249**     | -0.173**      | -0.230**          | 1           |
| Open-mindedness       | 3.56 | 0.42| 0.246**      | 0.169**       | 0.026             | -0.088      |

*p < 0.05.

**p < 0.01.

### Table 3. BPNSFS: descriptive statistics and correlations between the subscales

| BPNSFS subscales       | M    | SD  | AS    | AF     | RS   | RF    | CS    |
|-----------------------|------|-----|-------|--------|------|-------|-------|
| Autonomy satisfaction (AS) | 3.51 | 0.69|       | 1      | 1    | 1     | 1     |
| Autonomy frustration (AF)  | 2.91 | 0.82| -0.569*| 1      | 1    | 1     | 1     |
| Relatedness satisfaction (RS) | 4.05 | 0.56| 0.412*| -0.345*| 1    | 1     | 1     |
| Relatedness frustration (RF) | 2.11 | 0.67| -0.368*| 0.323*| -0.616*| 1     | 1     |
| Competence satisfaction (CS) | 3.94 | 0.63| 0.517*| -0.370*| 0.316*| -0.368*| 1     |
| Competence frustration (CF)  | 2.37 | 0.85| -0.432*| 0.437*| -0.282*| 0.436*| -0.600*|

*p < 0.01.

### Table 4. SOS-S: descriptive statistics and correlations between the subscales

| SOS-S subscales     | M    | SD  | Event load |
|---------------------|------|-----|------------|
| Personal vulnerability | 2.41 | 0.92| 0.636*     |
| Event load          | 3.02 | 1.00| 1          |

*p < 0.001.

z = -2.212; \quad p = 0.027, \]  
\[ z = -2.033; \quad p = 0.042, \]  
\[ z = -1.962; \quad p = 0.050. \]
Comparative Fit Index (CFI) = 0.996; Root Mean Square Error of Approximation (RMSEA) = 0.029 [0.000–0.067]. \( \chi^2 = 22.909; df = 19 \); NFI = 0.975; TLI = 0.990; CFI = 0.996; RMSEA = 0.029 [0.000–0.067]. The scalar estimates of the model on associations between neuroticism, unsatisfied needs, and stress overload are presented in Table 9.

Likewise, the authors created model on associations between conscientiousness, unsatisfied needs, and stress overload (Fig. 2). Findings revealed that the fit of the model with the correlated errors was good, \( \chi^2 = 26.608; df = 19 \); NFI = 0.969; TLI = 0.978; CFI = 0.991; RMSEA = 0.041 [0.000–0.075]. \( \chi^2 = 26.608; df = 19 \); NFI = 0.969; TLI = 0.978; CFI = 0.991; RMSEA = 0.041 [0.000–0.075]. The scalar estimates of the model on associations between conscientiousness, unsatisfied needs, and stress overload are presented in Table 10.

Furthermore, the authors created model on associations between basic psychological needs’ satisfaction and four personality traits, namely, Extraversion, Agreeableness, Conscientiousness, and Open-Mindedness (Fig. 3). Findings revealed that the fit of the model was good, \( \chi^2 = 7.338; df = 6 \); NFI = 0.974; TLI = 0.975; CFI = 0.995; RMSEA = 0.031 [0.000–0.093]. \( \chi^2 = 7.338; df = 6 \); NFI = 0.974; TLI = 0.975; CFI = 0.995; RMSEA = 0.031 [0.000–0.093]. The scalar estimates of the model on associations between basic psychological needs’ satisfaction and personality traits are presented in Table 11.

**DISCUSSION**

This research found no significant differences in stress overload between the sectors which is in line with the previously
Table 7. Multiple regression models, the dependent variable is personal vulnerability (PV), and the predictors are personality traits

| Model                                                                 | Unstandardized coefficients | Standardized coefficients | Significance |
|----------------------------------------------------------------------|-----------------------------|---------------------------|--------------|
|                                                                      | B                           | Std. error                | Beta         | t            | p             |
| E. Multiple regression with five predictors: Extraversion, Agreeableness, Conscientiousness, Neuroticism, Open-Mindedness |                             |                           |              |              |               |
| Constant                                                            | 2.184                       | 0.733                     |              |              | 2.979         | 0.003         |
| Extraversion                                                        | -0.200                      | 0.103                     | -0.118       | -1.932       | 0.055         |
| Agreeableness                                                       | -0.015                      | 0.102                     | -0.009       | -0.151       | 0.880         |
| Conscientiousness                                                   | -0.228                      | 0.109                     | -0.126       | -2.093       | 0.037         |
| Neuroticism                                                         | 0.735                       | 0.090                     | 0.471        | 8.140        | <0.001        |
| Open-mindedness                                                     | -0.105                      | 0.123                     | -0.050       | -0.850       | 0.396         |
| R = 0.569; R² = 0.323; Adj. R² = 0.308; Std. Error of the Estimate = 0.72445; F(2.239) = 21.324; p < 0.001 |
| F. Multiple regression with two predictors: Conscientiousness, Neuroticism |                             |                           |              |              |               |
| Constant                                                            | 1.378                       | 0.492                     |              |              | 2.500         | 0.006         |
| Conscientiousness                                                   | -0.307                      | 0.102                     | -0.171       | -3.001       | 0.003         |
| Neuroticism                                                         | 0.723                       | 0.086                     | 0.476        | 8.369        | <0.001        |
| R = 0.541; R² = 0.292; Adj. R² = 0.286; Std. Error of the Estimate = 0.73296; F(2.239) = 47.726; p < 0.001 |

Table 8. Multiple regression models, the dependent variable is personal vulnerability (PV), and the predictors are basic psychological needs’ satisfaction and frustration

| Model                                                                 | Unstandardized coefficients | Standardized coefficients | Significance |
|----------------------------------------------------------------------|-----------------------------|---------------------------|--------------|
|                                                                      | B                           | Std. error                | Beta         | t            | p             |
| G. Multiple regression with six predictors: Autonomy Satisfaction, Autonomy Frustration, Relatedness Satisfaction, Relatedness Frustration, Competence Satisfaction, Competence Frustration |                             |                           |              |              |               |
| Constant                                                            | 1.154                       | 0.876                     |              |              | 1.316         | 0.190         |
| Autonomy Satisfaction                                               | 0.021                       | 0.091                     | 0.017        | 0.229        | 0.819         |
| Autonomy Frustration                                                 | 0.149                       | 0.073                     | 0.140        | 2.048        | 0.042         |
| Relatedness Satisfaction                                            | -0.181                      | 0.133                     | -0.104       | -1.362       | 0.175         |
| Relatedness Frustration                                             | 0.084                       | 0.114                     | 0.056        | 0.735        | 0.463         |
| Competence Satisfaction                                             | -0.050                      | 0.120                     | -0.030       | -0.415       | 0.678         |
| Competence Frustration                                              | 0.649                       | 0.098                     | 0.483        | 6.612        | <0.001        |
| R = 0.646; R² = 0.417; Adj. R² = 0.400; Std. Error of the Estimate = 0.63525; F(2.239) = 24.219; p < 0.001 |
| H. Multiple regression with two predictors: Autonomy frustration, Competence frustration |                             |                           |              |              |               |
| Constant                                                            | 0.245                       | 0.187                     |              |              | 1.313         | 0.190         |
| Autonomy frustration                                                | 0.195                       | 0.063                     | 0.180        | 3.109        | 0.002         |
| Competence frustration                                              | 0.677                       | 0.073                     | 0.536        | 9.250        | <0.001        |
| R = 0.636; R² = 0.404; Adj. R² = 0.399; Std. Error of the Estimate = 0.64926; F(2.239) = 73.896; p < 0.001 |

mentioned results (e.g., Tabassum, 2013). Private sector employees demonstrated higher autonomy and relatedness satisfaction, while public sector employees demonstrated higher autonomy frustration. Based on previous research (Baum, Mooney, Robinson, & Solnet, 2020; Levi, Vashdi, & Vigoda-Gadot, 2020), the authors hypothesized that public sector employees would demonstrate lower scores on basic psychological needs’ satisfaction. Moreover, some studies indicated that the quality of interpersonal relationships was better in the private sector than in the public (Szostek, 2020), while emotional support during the COVID-19 pandemic were also associated with less stress and burnout (Afualani et al., 2021). This study found that private sector employees demonstrated higher autonomy and relatedness satisfaction, while public sector employees demonstrated higher autonomy frustration. These findings are consistent with the previous studies indicating that the scores of basic psychological needs’ satisfaction is significantly higher in the private sector (Sadaf, Aziz, & Anjum, 2019; Szostek, 2020).

In this study, the public sector employees demonstrated higher scores on agreeableness and conscientiousness, but no significant differences between public and private sectors were found comparing the scores on extraversion, neuroticism, and open-mindedness. These results on differences might be related to the research indicating that compared to those in the private sector, civil servants were characterized by more outstanding organizational citizenship (Ingrams, 2020), while the results on the absence of significant differences between the private and public sectors employees personality traits are consistent with many studies (Irissappane & Kavitha, 2014). However, these findings partially contradict some studies indicating that the employees of the private sector demonstrates higher scores on open-mindedness, conscientiousness, neuroticism, and extraversion than employees of the public sector (Luis de Moura, Janes Carneiro, de Lemos Dias, & Silva Oliveira, 2019).

In this study, the results of a multiple linear regression indicated that neuroticism and negatively versed
conscientiousness predict stress overload components: event load and personal vulnerability, which complement some previous studies (Liu et al., 2021). The authors have found that autonomy frustration and competence frustration predict stress overload: event load and personal vulnerability, which adds to some previous studies (Ahmed et al., 2021; Chadee et al., 2021; Yan et al., 2021). Furthermore, this study identified some significant associations between neuroticism, unsatisfied needs, and stress overload; conscientiousness, unsatisfied needs, and stress overload; basic psychological needs’ satisfaction and four personality traits, namely, extraversion, agreeableness, conscientiousness, and open-mindedness. These findings at least

Fig. 1. Model on associations between neuroticism, unsatisfied needs, and stress overload.

Table 9. Scalar Estimates of the model on associations between neuroticism, unsatisfied needs, and stress overload

| Variables             | Unstandardized estimates | S.E.  | Standardized estimates |
|-----------------------|--------------------------|-------|------------------------|
| Neuroticism ->        | Unsatisfied needs        | 0.641 | 0.062                  | 0.667                  |
| Unsatisfied needs ->  | Stress overload          | 1.254 | 0.107                  | 0.815                  |
| Unsatisfied needs ->  | Frustrated competence    | 1.000 | –                      | 0.816                  |
| Unsatisfied needs ->  | Satisfied competence     | −0.618| 0.055                  | −0.642                 |
| Unsatisfied needs ->  | Frustrated relatedness   | 0.586 | 0.069                  | 0.577                  |
| Unsatisfied needs ->  | Satisfied relatedness    | −0.359| 0.060                  | −0.417                 |
| Unsatisfied needs ->  | Frustrated autonomy      | 0.842 | 0.097                  | 0.585                  |
| Unsatisfied needs ->  | Satisfied autonomy       | −0.666| 0.080                  | −0.564                 |
| Stress overload ->    | Personal vulnerability   | 1.000 | –                      | 0.968                  |
| Stress overload ->    | Event load               | 0.775 | 0.077                  | 0.680                  |
| e1 ← e2               |                          | −0.123| 0.025                  | −0.335                 |
| e3 ← e4               |                          | −0.109| 0.016                  | −0.521                 |
| e5 ← e6               |                          | −0.057| 0.016                  | −0.339                 |
| e1 ← e5               |                          | 0.062 | 0.015                  | 0.269                  |
| e1 ← e3               |                          | 0.043 | 0.014                  | 0.174                  |
| e3 ← e5               |                          | 0.025 | 0.010                  | 0.135                  |
| e7 ← e2               |                          | 0.172 | 0.033                  | 0.356                  |
modestly contribute to the extensive studies on associations between needs’ satisfaction and personality traits (Montag, Sindermann, Lester, & Davis, 2020; Nishimura & Suzuki, 2016), associations between stress and need’s satisfaction (Chadee et al., 2021; Yan et al., 2021), and associations between stress and personality traits (Liu et al., 2021).

CONCLUSIONS
This study found no statistically significant differences between the private and public sector employees in the stress overload, neither event load nor personal vulnerability components. In the study, private sector employees demonstrated higher autonomy and relatedness satisfaction, while public sector employees
demonstrated higher autonomy frustration. Furthermore, public sector employees demonstrated higher scores on agreeableness and conscientiousness, but no significant differences between public and private sectors were found comparing the scores on extraversion, neuroticism, and open-mindedness.

In this study, neuroticism and negatively versed conscientiousness predicted stress overload, both event load and personal vulnerability. Neuroticism and negatively versed conscientiousness predicted unsatisfied needs which predicted stress overload, while satisfied needs related to extraversion, agreeableness, conscientiousness, and open-mindedness. The SEM identified some significant associations between neuroticism, unsatisfied needs, and stress overload; conscientiousness, unsatisfied needs, and stress overload; basic psychological needs’ satisfaction and four personality traits, namely, extraversion, agreeableness, conscientiousness, and open-mindedness.

CONFLICT OF INTEREST
None.

DATA AVAILABILITY STATEMENT
Data available on request from the authors.
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