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# HEALTH BEHAVIOUR, STRESS, AND POLICE TRAINEES

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ABSTRACT: *Occupational stress has adverse effects on the health of police officers which may have a negative impact on their work in the long run. The same may apply to police trainees who have been less studied in this respect so far.*

*To investigate this issue, we performed a cross-sectional study in probationer police officers in their second school year in two grades at one of the Hungarian law enforcement schools. The study was performed in two waves in 2016 (*N = *138) and 2018 (*N = *94). We explored the connection between stress exposure as measured by the Occupational Stress Questionnaire for Law Enforcement Services, and health-related behaviours, particularly alcohol consumption, smoking, and physical activity as measured by a custom-made questionnaire.*

*Variance analysis showed that police stress factors have a connection with health behaviours in the two grades: relations between smoking status, alcohol consumption, and binge drinking on the one hand and Individual, Personal factors on the other in 2016 and between the frequency of physical activity, alcohol consumption and binge drinking on the one hand and Workload factors on the other in 2018. The findings obtained in 2016 and 2018 are different in many respects. Overall, the relationship between stress exposure and health-related behaviours was more obvious in 2018 than in 2016.*

*Our study revealed important connections between stress exposure and health-related behaviours in police trainees, but the differences observed in the two waves indicate the complexity of the relationship and require further – preferably longitudinal – studies on the issue.*

KEYWORDS: *smoking, alcohol consumption, physical activity, work-related stress, police trainees*

## INTRODUCTION

### About the Hungarian Police Officer Training System

We could find just a few publications about the Hungarian police training system. This phenomenon has special reasons, for example, the diversity of the training system (secondary form vs. higher form, training in the school system or outside of school system), or the consecutive changes in the training system.

The secondary form of the training is conducted in the four law enforcement schools in Hungary[1] (but, predictably, that the country will have only two schools at the moment of the publication of this article). The higher form is conducted at the Faculty of Law Enforcement of the University of Public Service. The secondary form of training in school has two types now, the two-year-long, and the one and a half-year-long. The latter is really new because it started only in September 2017 while the two-year-long form has a long history.

The school education has some specialties that can encumber the state both for the teachers and the students. It could be highlighted that in Act XLII of 2015 on the Service Status of Professional Members of Law Enforcement Agencies § 49 (4) articles declared the earliest time of the appointment for probationer police officers (hereinafter: police trainees) – now this date is the successful completion of their first school year. It is a favourable change because earlier the start of the probation was subject to a political decision adapted to headcount. In the worst cases, this meant that the students became probationer police officers after 3 or 6 months of education.[2]

Double legal status becomes effective after the appointment: they have an academic commitment as students in the law enforcement school, and duty commitment as police trainees in a police department. It makes a double expectation system in which they have to correspond.

It is not surprising that the generality of students is a member of the generation Z in the full-time police officer courses both in secondary and higher forms. They have several traits that pose a real challenge for the teachers who are mostly members of generation X. I have experience in these difficulties because I have worked in one of the law enforcement schools for 4.5 years as a psychologist and teacher. So I have communicated with students and fellow teachers daily. I have been inspired to a research project by the story of the students who started their studies in September 2014 and participated in the handling of migration in 2015. I engrossed psychological research about their experience during their two-year-long training from the point of view of occupational stress and health behaviour.

## Stress Research, Health Behaviour, and Young Police Officers – Brief Research Review

Police stress research has a tradition in the last 40 years, but we have really divergent pictures about how overloading police work can be: some study said the police were one of the most stressful occupations[3], and some studies said it was only at average level.[4]

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1 Cseh, J. "A fiatalok rendészeti felkészítése az Adyligeti Rendészeti Szakközépiskolában". *Pécsi Határőr Tudományos Közlemények* V. 2006. 47-62.; Borbély, Zs. "Az iskolarendszerű rendőrképzés napjainkban". In Zsámbokiné Ficskovszky, Á. (ed), *Biztonság, szolgáltatás, fejlesztés, avagy új irányok a bevételi hatóságok működésében.* Budapest: Magyar Rendészettudományi Társaság Vám- és Pénzügyőr Tagozata, 2019. 38-50.

2 Borbély. "Az iskolarendszerű rendőrképzés napjainkban". 38-50.

3 Anshel, M. "A conceptual modal and implications for coping with stressful events in police work". *Criminal Justice and Behaviour*, 27/3. 2000. 375-400.; Johnson, S. et al. „The experience of work-related stress across occupations". *Journal of Managerial Psychology* 20/2. 2005. 178-187.

4 Brown, J. M. and Campbell, E. A. "Sources of occupational stress in the police". *Work & Stress* 4/4. 1990. 305-318.; Bar-On, R. et al. "Emotional expression and implications for occupational stress: an application of the Emotional Quotient Inventory (EQ-i)". *Personality and Individual Differences* 28/6. 2000. 1107-1118.

There are some typical types of stress research and one of that is focusing on the health consequences of police stress. These studies are aiming at exploring the physical and psychological consequences of work-related stress. It has a lot of research about suicide, cardiovascular and digestive diseases, mental health (depression, anxiety), personal problems misuse of substances (alcohol, drug).[5]

The relationship between occupational stress on the one hand and smoking and alcohol consumption on the other is supported by studies. These studies showed that work-related stress can increase smoking among male officers, indicating the connection between these tendencies and burnout.[6] Furthermore, the studies have shown the highly-stressed police often drink more alcohol.[7]

Alcohol consumption is one of the most examined health behaviour problems, so we have some research results about it at special police task units.[8]

We can find just a few studies about young police officers in the international research field. It has various reasons, for example, the really different selection and training systems in the countries. We can compare the results about the effect of training and experiences on mental health because of it. However, some studies were made comparing, for example, stress, coping mechanism[9], or frustration, depression, anxiety by years of service.[10] But if we looked out, they show various pictures about how the years of service moderate the mental health, and the number of longitudinal research in the time of probation gives a very short list.

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[5] Abdollahi, M. K. "Understanding Police Stress Research". *Journal of Forensic Psychology Practice* 2/2. 2002. 1-24.

[6] McCarty W., Zhao, J. and Garland, B. E. "Occupational stress and burnout between male and female police officers". *Policing: An International Journal of Police Strategies & Management* 30/ 4. 2007. 672-691.; Smith, D. R. et al. "Alcohol and Tobacco Consumption among Police Officers". *Kurume Medical Journal* 52/1-2. 2005. 63-65.

[7] Smith et al. "Alcohol and Tobacco Consumption…" 63-65.; Violanti, J. M. et al. "Police and Alcohol Use: A Descriptive Analysis and Associations with Stress Outcomes". *American Journal of Criminal Justice* 3/6. 2011. 344-356.

[8] Borbély, Zs., Farkas, J. and Tőzsér, E. "A tömeges méretű illegális migráció pszichés következményei a rendészeti feladatellátás során". *Hadtudományi Szemle* 10/3. 2017. 288-304.; Borbély, Zs., Fridrich, A. C. and Tőzsér E. "Az Ideiglenes Biztonsági Határzár menti feladatellátás hatása a határzárat védők magánéletére". *Honvédségi Szemle* 146/6. 2018. 65-79.; Farkas et al. "A »migráns helyzet« feladatellátása következtében jelentkező pszichés hatások". *Pro Publico Bono – Magyar Közigazgatás* 6/1. 2018. 4-33.

[9] Violanti, J. M. "What does high stress policing teach recruits? An analysis of coping". *Journal of Criminal Justice* 21/4. 1993. 411-417.

[10] Bartol, C. R. "Psychological characteristics of small-town police officers". *Journal of Police Science and Administration* 10/1. 1982. 58-63.; Kohli, K. and Bajpai, G. S. "A Comparative Study of Frustration, Depression and Deprivation amongst Trainee and Serving Police Officials". *Indian Journal of Criminology and Criminalistics* 27/3. 2006. https://pdfs.semanticscholar.org/77f5/dfa43bdaeee09afb1b9561ef8de13e80b9db.pdf, Accessed on 30 October 2010.; Williams, V., Ciarrochi, J. and Deane, F. P. "On being mindful, emotionally aware, and more resilient: longitudinal pilot study of police recruits". *Australian Psychologist* 45/4. 2010. 274-282.; Husain, W. "Depression, Anxiety and Stress among Junior & Senior Police Officers". *Academic Research International* 5/3. 2014. 239-244.

The pioneer of Hungarian police stress research is Lt Col Erika Malét-Szabó. Her PhD thesis and articles have been the most comprehensive exploration of this issue.[11] The results show that younger officers experienced lower stress than officers with more years in service. In addition, we can find some research about the stress profile of different units[12] and the police trainees.[13]

# METHODS

## Study sample

The police officers who finished their training in 2016 and 2018 had a special probation year. The appointment and the opening of the probation were unexpected in August 2015 in the case of the class of 2014-2016, but it was necessary because of the migration crisis. They spent their probation at Riot Police ranger companies. The most significant task was guarding the Temporary Security Border, which was executed together with the designated law enforcement units of every county police department and Hungarian Defence Force. They served far from their home and family.

In the case of the class of 2016-2018, the appointment was proposed, and they started the probation in July 2015. The majority spent their probation at Riot Police, next to the southern border of Hungary, far from their home and family. But in this class there was a little group who spent this year at a County Police, near their home or at home.

These two classes showed some significant differences in their experiences in the training process, so we should not handle them as a big sample ($N==232$) but in two smaller groups ($N=138$ and $N=94$) in the statistical analysis.

Data were collected in one of the four Hungarian law enforcement schools in two waves, after the trainees' successful final exams in June 2016 and 2018. It was a grouped data collection. Participation in the survey was anonym and voluntary.

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[11] Szabó, E. and Rigó, B. "A munkahelyi stresszmegterhelés sajátosságai a rendőrség hivatásos állományának körében". *Alkalmazott Pszichológia* VII/3. 2005. 15-29.; Szabó, E. "A munkahelyi egészségpszichológia és egészségfejlesztés a Magyar Köztársaság Rendőrségén, valamint a szubjektíve észlelt munkahelyi stresszterheltség jellegzetességei – különös tekintettel az idői tényezőre – a hivatásos állományú rendőrök körében". PhD Thesis. Debrecen: University of Debrecen Faculty of Humanities, 2009. 1-260.; Malét-Szabó, E. and Szatmári, A. "A rendőr lelki biztonsága – avagy a biztonság megőrzésének egyik alappillére a rendőr lelki biztonsága". *Pécsi Határőr Tudományos Közlemények* XIII. 2012. 399-412.

[12] Fridrich, A. C. "Az eltérő szakterületeken dolgozó rendőrök teszteredményeinek vizsgálata – hasonlóságok és különbségek az RMSK tükrében". PhD Thesis. Budapest: Eötvös Loránd University Faculty of Education and Psychology, 2015. 1-65.; Tegyey, A. C. "Eltérő szakterületek a szervezeti kultúrában". In Farkas, J., Horváth, J. (eds), *Szervezeti kultúrák és kutatásuk.* Budapest: Dialóg Campus Kiadó, 2020. 139-156.

[13] Borbély, Zs. "Egészségmagatartás, kiégés, mentális egészség – specifikus stresszorok hatása a Rendőrség próbaidős tiszthelyettes állományában". PhD Thesis. Budapest: Eötvös Loránd University Faculty of Education and Psychology, 2017. 1-155.; Borbély, Zs. "Specifikus stresszorok és a szervezeti kultúra". In Farkas, J., Horváth, J. (eds), *Szervezeti kultúrák és kutatásuk.* Budapest: Dialóg Campus Kiadó, 2020. 116-138.; Borbély, Zs. "A munkahelyi stressz és a rendőrtanulók". In Baráth N. E. and Mezei J. (eds), *Rendészet-Tudomány-Aktualitások. A rendészettudomány a fiatal kutatók szemével.* Budapest: Doktoranduszok Országos Szövetsége Rendészettudományi Osztálya, 2019. 39-47.; Borbély, Zs. "Egészségmagatartás és mentális egészség – nemi különbségek a munkahelyi stressz megélésében". *Belügyi Szemle* 67/7-8. 2019. 37-50.

## Measures

The survey measured sociodemographic questions, occupational stress, questions about health behaviour, and motivation for a healthy lifestyle.

Six plus one variables were included as sociodemographic questions: age, sex, current marital status, place of residence, financial circumstances and the plus one was the field of probation in 2018.

Work-related stress was measured by Occupational Stress Questionnaire for Law Enforcement Services (in Hungarian: Rendvédelmi szervek munkahelyi stressz kérdőíve, abbreviation: RMSK)[14]. This is a special test for law enforcement, the developers have not publicized it but it was introduced in the most particular way at a PhD thesis by Erika Szabó in 2009. The questionnaire has two parts: one part about the work and workplace and another about individual, personal factors. Every item in the questionnaire is scored on a Likert scale ranging from one to six, in accordance with instructions at the beginning of every session[15].

In 2018 the Perceived Stress Scale Hungarian version for measuring the stress level was recorded the last month[16].

The questions about the health behaviour were based on the relevant literature (e.g. European Health Interview Survey)[17] and involved the following fields:

- physical activity: regularity, frequency, length of time, using performance-enhancing and nutritional supplements;
- smoking: status, cigarette consumption per day, attitude to the getting out of the habit, smoking motivation (Wisconsin Inventory of Smoking Dependence and Motives short form, Hungarian version: WISDM-37 with 11 motivational factors);[18]
- alcohol consumption: frequency, binge drinking, circumstances.

[14] Szabó. "A munkahelyi egészségpszichológia..." 1-260.

[15] Szabó. "A munkahelyi egészségpszichológia…" 1-260.

[16] Stauder, A. and Konkoly Thege, B. "Az Észlelt Stressz Kérdőív (PSS) magyar verziójának jellemzői". *Mentálhigiéné és Pszichoszomatika* 7/3. 2006. 203-216.

[17] Boros, J., Németh, R., Vitrai, J. "Országos Lakossági Egészségfelmérés OLEF 2000. Research riport". Egészségmonitor. 2002. http://www.egeszsegmonitor.hu/dok/kutatasi_jelentes_OLEF2000.pdf Accessed on 24 October 2010.; Varga, J. "Testedzés és egészségmagatartás: Védőfaktor-e a sport?" PhD Thesis. Budapest: Eötvös Loránd University Faculty of Humanities, 2002. 1-78.; Urbán, R. and Marián, B. "A dohányzás szocioökonómiai prediktorainak és a stressz hatásának vizsgálata magyar reprezentatív mintában". In Urbán, R., Kugler, Gy., Marián, B., Oláh, A., Szilágyi, Zs. and Varga, J. (eds), *A dohányzás egészségpszichológiája.* Budapest: Országos Addiktológiai Intézet, 2003. 89-105.; Urbán, R., Kugler, Gy. and Szilágyi, Zs. "A nikotindependencia mérése és korrelátumai magyar felnőtt mintában". In Urbán, R., Kugler, Gy., Marián, B., Oláh, A., Szilágyi, Zs. and Varga, J. (eds), *A dohányzás egészségpszichológiája.* Budapest: Országos Addiktológiai Intézet, 2004. 127-155.; Boros, J. "Országos Lakossági Egészségfelmérés OLEF 2003. Research riport". Budapest: Országos Epidemiológiai Központ, 2005.; Pikó, B. and Keresztes, N. *Sport, lélek, egészség.* Budapest: Akadémiai Kiadó, 2007. 1-157.; "Egészségfelmérés (ELEF), 2009". *Statisztikai Tükör* 4/50. 2010. 1-7.; "Európai lakossági egészségfelmérés, 2014". *Statisztikai Tükör* 9/29. 2015. 1-9.

[18] Smith, S. S. et al. "Development of the Brief Wisconsin Inventory of Smoking Dependence Motives". *Nicotine & Tobacco Research* 12/5. 2010. 489-499.; Vajer, P. et al. "Psychometric Properties and Construct Validity of the Brief Wisconsin Inventory of Smoking Dependence Motives in an Internet-Based Sample of Treatment-Seeking Hungarian Smokers". *Nicotine & Tobacco Research* 13/4. 2011. 273-281.

The motivational background of a healthy lifestyle was measured by the Hungarian version of the Health Orientation Scale (HOS)[19] which consists of 10 subscales. The items are scored on a Likert scale from one to five.

The psychometric indicators of all questionnaires corresponded to the previous surveys.[20]

Table 1 *Descriptive statistics of health behaviours of class 2016 and class 2018*

| Variables | 2016 | | | 2018 | | |
|---|---|---|---|---|---|---|
| | Mean (SD) | n | % | Mean (SD) | n | % |
| **DEMOGRAPHIC VARIABLES** | | | | | | |
| GENDER | | | | | | |
| Male | | 84 | 60.9 | | 66 | 70.2 |
| Female | | 54 | 39.1 | | 28 | 29.8 |
| AGE | 21.67 (2.27) | | | 22.10 (2.68) | | |
| MARITAL STATUS | | | | | | |
| Single | | 65 | 47.1 | | 45 | 47.9 |
| In a relationship | | 71 | 51.5 | | 46 | 48.9 |
| Married | | 1 | 0.7 | | 3 | 3.2 |
| Not answered | | 1 | 0.7 | | 0 | 0 |
| **PHYSICAL ACTIVITY** | | | | | | |
| REGULARITY | | | | | | |
| Yes | | 109 | 79.0 | | 60 | 63.8 |
| No | | 25 | 18.1 | | 33 | 35.1 |
| no answer | | 4 | 2.9 | | 1 | 1.1 |
| FREQUENCY | | | | | | |
| No regular physical activity | | 15 | 10.9 | | 30 | 31.9 |
| 1-2 times per week | | 37 | 26.8 | | 25 | 26.6 |
| 3-4 times per week | | 52 | 37.7 | | 23 | 24.5 |
| 5 or more times per week | | 30 | 21.7 | | 15 | 16.0 |
| no answer | | 4 | 2.9 | | 1 | 1.1 |

[19] Snell, W. E. et al. "The Health Orientation Scale: A measure of psychological tendencies associated with health". *European Journal of Personality* 5/2. 1991. 169-183.

[20] Stauder and Konkoly Thege. "Az Észlelt Stressz Kérdőív (PSS)…". 203-216.; Szabó. „A munkahelyi egészségpszichológia…" 1-260.; Süle, A. "A jóga, mint ősi stresszkezelési módszer". PhD Thesis. Budapest: Eötvös Loránd University Faculty of Education and Psychology, 2009. 1-106.; Kiss, M. "A H1N1-influenza elleni védőoltások igénybevételének egészségpszichológiai vonatkozásai". PhD Thesis. Budapest: Eötvös Loránd University Faculty of Education and Psychology, 2010. 1-81.; Szabó, K. "Tánc és lelki egészség. Avagy: A jóllét, az áramlat-élmény, a nőiesség, a testkép és az egészségorientáció kapcsolata a különböző táncstílusok mentén". PhD Thesis. Budapest: Eötvös Loránd University Faculty of Education and Psychology, 2010. 1-114.; Vajer et al. "Psychometric Properties…" 273-281.; Fridrich. "Az eltérő szakterületeken dolgozó…". 1-65.; Borbély, Zs. Egészségmagatartás, kiégés… Budapest: Eötvös Loránd University Faculty of Education and Psychology, 2017. 1-155.; Borbély. "Specifikus stresszorok…".; Borbély. "Egészségmagatartás és mentális egészség…". 37-50.

| Variables | 2016 | | | 2018 | | |
|---|---|---|---|---|---|---|
| | Mean (SD) | n | % | Mean (SD) | n | % |
| **SMOKING** | | | | | | |
| STATUS | | | | | | |
| Non-smoker | | 70 | 50.7 | | 51 | 54.3 |
| Quitted smoker | | 5 | 3.6 | | 7 | 7.4 |
| Casual smoker | | 10 | 7.2 | | 11 | 11.7 |
| Regular smoker | | 49 | 35.5 | | 23 | 24.5 |
| CIGARETTE CONSUMPTION PER DAY | | | | | | |
| Non-smoker | | 76 | 55.1 | | 58 | 61.7 |
| 1-5 cigarette per day | | 5 | 3.6 | | 7 | 7.4 |
| 5-10 cigarettes per day | | 15 | 10.9 | | 12 | 12.8 |
| 10-15 cigarettes per day | | 17 | 12.3 | | 8 | 8.5 |
| 15-19 cigarettes per day | | 10 | 7.2 | | 5 | 5.3 |
| more than 19 cigarettes per day | | 11 | 8.0 | | 1 | 1.1 |
| **ALCOHOL CONSUMPTION** | | | | | | |
| FREQUENCY OF ALCOHOL CONSUMPTION | | | | | | |
| Never drink | | 31 | 22.5 | | 8 | 8.5 |
| Monthly or rarer | | 63 | 45.7 | | 57 | 60.6 |
| More times in a month | | 17 | 12.3 | | 13 | 13.8 |
| Weekly | | 10 | 7.2 | | 7 | 7.4 |
| More times in a week | | 4 | 2.9 | | 5 | 5.3 |
| Daily | | 8 | 5.8 | | 2 | 2.1 |
| BINGE DRINKING | | | | | | |
| Never drink so much | | 44 | 31.9 | | 17 | 18.1 |
| Monthly or rarer | | 54 | 39.1 | | 53 | 56.4 |
| More times in a month | | 12 | 8.7 | | 10 | 10.6 |
| Weekly | | 8 | 5.8 | | 6 | 6.4 |
| More times in a week | | 2 | 1.4 | | 4 | 4.2 |
| Daily | | 7 | 5.0 | | 2 | 2.1 |

Table 2 *Descriptive statistics of the RMSK, PSS, WISDM-37 and HOS of class 2016 and class 2018*

| Questionnaires, scales, subscales | | | 2016 | | 2018 | |
|---|---|---|---|---|---|---|
| | | | Mean | SD | Mean | SD |
| RMSK | **Workload events** | | **51,23** | **48,94** | **24,49** | **29,59** |
| | Workload factors | Subjective opinion about workload | 2,02 | 0,81 | 1,58 | 0,81 |
| | | Workload from the characteristic of the organization | 1,31 | 0,83 | 1,24 | 0,81 |
| | | Role conflicts from the characteristic of the work | 1,91 | 0,85 | 1,76 | 0,94 |
| | | Subjective opinion about the workplace atmosphere | 2,13 | 1,05 | 1,80 | 0,98 |
| | | Subjective opinion about the direction | 2,26 | 1,08 | 2,03 | 1,09 |
| | | Complex opinion about workload | 2,93 | 0,92 | 2,60 | 0,89 |
| | | Opinion about conveniences of the workplace | 2,69 | 1,00 | 2,32 | 0,87 |
| | | Opinion about working hours | 3,64 | 1,08 | 2,86 | 1,13 |
| | | External opinion about the workplace | 2,92 | 1,29 | 2,65 | 1,15 |
| | | Ethical aspects of the work | 2,68 | 1,53 | 2,05 | 1,19 |
| | | Personal equitation to the job | 2,90 | 1,13 | 2,60 | 1,24 |
| | | Effective workload | 2,99 | 0,97 | 2,51 | 0,95 |
| | | Opinion about financial acknowledgment | 2,54 | 1,30 | 3,19 | 1,52 |
| | | Opinion about personal responsibility | 2,98 | 1,17 | 3,00 | 1,41 |
| | | Opinion about organizational expectations | 2,76 | 1,09 | 2,39 | 1,02 |
| | | Opinion about the position in the organization | 2,87 | 1,00 | 2,60 | 1,08 |

| Questionnaires, scales, subscales | | | 2016 | | 2018 | |
|---|---|---|---|---|---|---|
| | | | Mean | SD | Mean | SD |
| RMSK | Individual, personal factors | Health status | 1,94 | 0,89 | 1,68 | 0,55 |
| | | Internal vs. external control | 3,09 | 0,82 | 3,51 | 0,75 |
| | | Type A or Type B personality | 3,34 | 0,73 | 3,55 | 0,56 |
| | | Activity | 3,06 | 0,92 | 2,82 | 0,87 |
| | | Motivation | 3,25 | 1,00 | 3,31 | 0,80 |
| | | Social support | 3,23 | 1,35 | 2,82 | 0,99 |
| | | Social support – Person | 8,18 | 2,39 | 7,57 | 2,51 |
| | | Stress reduction | 3,51 | 0,54 | 3,78 | 0,43 |
| | **Workplace stress index** | | 4,36 | 4,98 | 1,91 | 2,24 |
| **Perceived Stress Index** | | | no data | no data | 23,15 | 8,07 |
| WISDM-37 | Affiliative attachment | | 8,53 | 4,99 | 6,41 | 4,59 |
| | Automaticity | | 12,51 | 6,12 | 10,44 | 6,56 |
| | Loss of control | | 12,03 | 6,48 | 8,91 | 5,18 |
| | Cognitive enhancement | | 9,75 | 4,85 | 9,63 | 5,31 |
| | Craving | | 12,31 | 6,52 | 10,44 | 6,11 |
| | Cue exposure/ associative process | | 9,12 | 4,50 | 8,91 | 4,54 |
| | Social/environmental goads | | 10,86 | 4,54 | 13,53 | 4,91 |
| | Taste | | 10,95 | 5,03 | 8,97 | 4,78 |
| | Tolerance | | 12,02 | 6,08 | 11,25 | 6,40 |
| | Weight control | | 8,58 | 4,53 | 6,41 | 4,22 |
| | Affective enhancement | | 10,51 | 5,06 | 8,75 | 4,77 |
| HOS | Personal Health Consciousness | | 16,11 | 3,76 | 17,65 | 3,71 |
| | Health Image Concern | | 13,57 | 3,94 | 10,68 | 4,67 |
| | Health Anxiety | | 12,92 | 3,62 | 9,58 | 3,91 |
| | Health-Esteem and Confidence | | 16,54 | 3,78 | 19,91 | 3,82 |
| | Motivation to Avoid Unhealthiness | | 15,50 | 4,15 | 16,76 | 4,16 |
| | Motivation for Healthiness | | 15,54 | 3,87 | 16,65 | 3,88 |
| | Internal Health Control | | 16,29 | 4,76 | 19,14 | 4,15 |
| | External Health Control | | 13,85 | 3,08 | 11,41 | 3,47 |
| | Health Expectations | | 15,84 | 3,37 | 19,34 | 3,73 |
| | Health Status | | 15,93 | 3,40 | 18,71 | 3,57 |

## Statistics

The data analysis was performed with the IBM SPSS 20 statistical software package and Microsoft Excel. Descriptive statistics are presented as means and standard deviations for continuous variables and percentages for nominal variables. Student t-tests for independent groups and effect sizes were calculated to compare RMSK scales as well as the regularity of physical activity. One-way ANOVA with post hoc (Hochberg GT2 – big difference in the size of groups, Gabriel – minimal difference in the size of groups, or Games-Howell – not eligible homogeneity of variance) analysis was used to test for the frequency of physical activity, smoking status, cigarette consumption per day, frequency of alcohol consumption and binge drinking. Pearson correlation coefficients were applied to assess correlations between RMSK subscales and PSS on the one hand and smoking motivations and health orientations subscales on the other side.

# RESULTS

Descriptive statistics of health behaviours are presented in *Table 1.* In 2016 138 surveys were completed. The mean age was 21.67 ($SD=2.27$ years). In this sample was 60.9% ($N=84$) male and 39.1% ($N=54$). In 2018 the number of participants was 94. The mean age was 22.10 ($SD=2.68$ years). In this sample was 70.2% ($N=66$) male and 29.8% ($N=28$).

Descriptive statistics of the scales and subscales of questionnaires are presented in *Table 2.*

## Physical activity

*Table 3* and *Table 4* present the results of the group comparison. Two significant results were found between RMSK scales and physical activity in class 2016. The regularity of physical activity showed significant differences only in Social support (Welch $d=2.10$, $p=0.040$, Cohen $d=0.39$). It was better in the regularly exercising group. The frequency of physical activity had also one relation to the RMSK subscales, with Social support ($F=2.73$, $p=0.047$). The post hoc analysis detected that the group of "five times or more per week" had greater support.

The physical activity showed another sort of connection to occupational stress in class 2018. The regularity of physical activity had a significant difference in the next RMSK subscales:

- Workload from the characteristic of the organization ($t=-2.70$, $p=0.008$)
- Role conflicts from the characteristic of the work ($t=-2.40$, $p=0.018$)
- External opinion about the workplace ($t=-2.31$, $p=0.023$)
- Ethical aspects of the work ($t=-2.15$, $p=0.034$)
- Opinion about personal responsibility ($t=-2.03$, $p=0.045$)
- Health status ($t=-2.22$, $p=0.029$)

The trainees, who reported regular physical activity, felt these factors less overloading and had better health.

The frequency of physical activity had only one significant relationship with RMSK scales, at Type A or Type B personality ($F=4.44$, $p=0.029$). The post hoc analysis showed that the group of "five times or more per week" had more Type A personality than the others.

## Smoking

The results of group comparisons concerning the smoking status and cigarette consumption per day are presented in *Table 3* and *Table 4.* One significant difference was found only in class 2016. Work-related events were reported more overloading by the non-smokers and causal smokers (Welch $d = 8.40$, $p = 0.005$). Furthermore, the analysis suggested one significant difference in class 2018. Opinion about working hours was reported more overloaded by the causal smokers, especially compared with quitted ex-smokers ($F = 3.83$, $p = 0.013$).

*Table 2* and *Table 3* show the results about cigarette consumption per day comparing to RMSK subscales too. Only two significant differences were reported by the trainees in 2018, but there were not any connections in 2016. The post hoc analysis showed that the group of 1-5 cigarettes consumption per day reported the highest Social support ($F = 2.58$, $p = 0.043$) and Social support per person ($F = 3.33$, $p = 0.014$), especially compared to the group of 10-15 cigarettes consumption per day.

Table 3 *Health behaviour connection to RMSK, 2016 (*N = *138) (**p ≤ 0,05 and ***p ≤ 0,01)*

| RMSK 2016 | | Physical activity | | Smoking | | Alcohol consumption | |
|---|---|---|---|---|---|---|---|
| | | Regularity | Frequency | Status | Cigarette per day | Drinking | Binge Drinking |
| | | t (p) | F (p) | F (p) | F (p) | F (p) | F (p) |
| **Workload events** | | 0,19 (0,849) | 0,78 (0,512) | *d* = 8,40** (0,001) | 1.04 (0.398) | 1,34 (0,292) | 0,76 (0,584) |
| **Workload factors** | Subjective opinion about workload | – 0,57 (0,573) | 0,73 (0,535) | 0,12 (0,951) | 1.40 (0.228) | 1,29 (0,272) | 0,79 (0,557) |
| | Workload from the characteristic of the organization | – 1,22 (0,224) | 1,26 (0,291) | 0,24 (0,866) | 1.18 (0.322) | 1,61 (0,161) | 0,78 (0,568) |
| | Role conflicts from the characteristic of the work | – 0,77 (0,445) | 1,23 (0,301) | 0,05 (0,987) | 2.11 (0.068) | 1,54 (0,183) | 1,18 (0,322) |
| | Subjective opinion about the workplace atmosphere | – 1,07 (0,285) | 1,17 (0,323) | 0,15 (0,930) | 0.93 (0.466) | 1,15 (0,337)) | 1,28 (0,275) |
| | Subjective opinion about the direction | – 1,35 (0,178) | 0,98 (0,404) | 0,28 (0,840) | 1.00 (0.422) | 0,59 (0,708) | 1,04 (0,396) |
| | Complex opinion about workload | – 1,03 (0,307) | 0,98 (0,406) | 0,22 (0,881) | 1.38 (0.236) | 1,06 (0,387) | 1,10 (0,364) |
| | Opinion about conveniences of the workplace | – 0,54 (0,588) | 0,51 (0,673) | 0,54 (0,656) | 1.05 (0.391) | 0,36 (0,876) | 0,83 (0,531) |
| | Opinion about working hours | 0,15 (0,879) | 0,34 (0,796) | 0,34 (0,796) | 0.36 (0.885) | 2,06 (0,075) | 0,93 (0,463) |

| RMSK 2016 | | Physical activity | | Smoking | | Alcohol consumption | |
|---|---|---|---|---|---|---|---|
| | | Regularity | Frequency | Status | Cigarette per day | Drinking | Binge Drinking |
| | | t (p) | F (p) | F (p) | F (p) | F (p) | F (p) |
| Workload factors | External opinion about the workplace | –1,79 (0,076) | 0,94 (0,424) | 0,58 (0,626) | 0.80 (0.550) | 1,58 (0,171) | 0,12 (0,989) |
| | Ethical aspects of the work | –0,93 (0,355) | 1,12 (0,343) | 0,03 (0,994) | 0.79 (0.556) | 0,44 (0,819) | 0,57 (0,723) |
| | Personal equitation to the job | –0,42 (0,674) | 1,06 (0,371) | 0,37 (0,774) | 1.54 (0.183) | 1,19 (0,318) | 1,20 (0,314) |
| | Effective workload | –0,72 (0,472) | 0,62 (0,602) | 0,25 (0,861) | 1.31 (0.265) | 1,05 (0,389) | 0,91 (0,480) |
| | Opinion about financial acknowledg-ment | –0,49 (0,629) | 0,07 (0,975) | 0,23 (0,875) | 0.30 (0.914) | 1,49 (0,197) | 1,78 (0,121) |
| | Opinion about personal responsibility | –0,30 (0,766) | 0,60 (0,615) | 1,47 (0,225) | 1.96 (0.089) | 0,43 (0,821) | 1,09 (0,427) |
| | Opinion about organizational expectations | –0,98 (0,330) | 1,31 (0,273) | 1,10 (0,350) | 1.87 (0.103) | 1,45 (0,211) | 0,72 (0,613) |
| | Opinion about the position in the organization | –1,19 (0,277) | 1,14 (0,336) | 0,23 (0,875) | 1.98 (0.086) | 1,69 (0,142) | 1,18 (0,322) |
| Individual, personal factors | Health status | –0,93 (0,357) | 0,27 (0,849) | 0,64 (0,589) | 0.68 (0.639) | 2,44 (0,071) | 0,95 (0,454) |
| | Internal vs. external control | 0,45 (0,656) | 0,08 (0,969) | 0,87 (0,457) | 1.09 (0.369) | 0,68 (0,639) | 0,37 (0,867) |
| | Type A or Type B personality | –0,84 (0,401) | 1,15 (0,331) | 1,11 (0,349) | 0.61 (0.695) | 2,34* (0,045) | 1,26 (0,287) |
| | Activity | 0,46 (0,648) | 0,90 (0,445) | 1,04 (0,379) | 0.84 (0.523) | 3,38** (0,007) | 2,56* (0,031) |
| | Motivation | $d$=0,04 (0,973) | 0,33 (0,805) | 2,24 (0,086) | 0.29 (0.916) | 2,01 (0,081) | 1,42 (0,221) |
| | Social support | $d$=2,10* (0,040) | 2,73* (0,047) | 2,08 (0,107) | 0.46 (0.807) | 2,42* (0,039) | 2,79* (0,020) |
| | Social support – Person | –0,18 (0,861) | 0,68 (0,565) | 0,88 (0,452) | 0.37 (0.868) | 4,780** (0,005) | 1,70 (0,140) |
| | Stress reduction | –0,30 (0,767) | 0,54 (0,653) | 0,02 (0,996) | 0.57 (0.721) | 0,78 (0,569) | 0,87 (0,507) |
| **Workplace stress index** | | –0,46 (0,645) | 1,82 (0,157) | 0,48 (0,694) | 0.56 (0.727) | 0,38 (0,863) | 0,19 (0,965) |

Table 4 *Health behaviour connection to RMSK and PSS, 2018 (*N = *94) (**p ≤ *0,05 and* ***p ≤ *0,01)*

| Stress scales 2018 | | | Physical activity | | Smoking | | Alcohol consumption | |
|---|---|---|---|---|---|---|---|---|
| | | | Regularity | Frequency | Status | Cigarette per day | Drinking | Binge Drinking |
| | | | t (p) | F (p) | F (p) | F (p) | F (p) | F (p) |
| RMSK | **Workload events** | | – 1,07 (0,287) | 0,48 (0,700) | 1,24 (0,299) | 1.02 (0.401) | *d* = 4,35* (0,033) | 1,75 (0,133) |
| | **Workload factors** | Subjective opinion about workload | – 1,83 (0,071) | 0,86 (0,463) | 1,68 (0,178) | 0.18 (0.947) | 2,59* (0,031) | 1,70 (0,143) |
| | | Workload from the characteristic of the organization | – 2,70** (0,008) | 2,04 (0,115) | 2,67 (0,053) | 0.50 (0.737) | *d* = 13,52** (0,000) | 0,79 (0,558) |
| | | Role conflicts from the characteristic of the work | – 2,40* (0,018) | 1,67 (0,180) | 2,18 (0,096) | 0.69 (0.598) | 1,86 (0,109) | 1,17 (0,333) |
| | | Subjective opinion about the workplace atmosphere | – 1,78 (0,078) | 0,91 (0,440) | 1,69 (0,175) | 0.18 (0.947) | 1,36 (0,249) | 0,77 (0,573) |
| | | Subjective opinion about the direction | – 1,62 (0,109) | 0,73 (0,537) | 1,54 (0,210) | 1.18 (0.326) | 2,33* (0,049) | 2,13 (0,069) |
| | | Complex opinion about workload | – 1,79 (0,076) | 0,98 (0,405) | 1,68 (0,178) | 0.25 (0.908) | 2,42* (0,042) | 1,77 (0,128) |
| | | Opinion about conveniences of the workplace | – 0,95 (0,343) | 0,13 (0,942) | 1,10 (0,355) | 0.33 (0.857) | *d* = 3,93* (0,043) | 1,66 (0,154) |
| | | Opinion about working hours | – 1,75 (0,090) | 0,89 (0,448) | 3,83* (0,013) | 0.18 (0.950) | 3,03* (0,014) | 2,47* (0,039) |
| | | External opinion about the workplace | – 2,31* (0,023) | 2,63 (0,055) | 2,12 (0,104) | 1.94 (0.111) | 1,74 (0,133) | 2,41* (0,043) |
| | | Ethical aspects of the work | – 2,15* (0,034) | 2,50 (0,065) | 1,61 (0,193) | 1.17 (0.331) | 0,36 (0,872) | 0,15 (0,979) |
| | | Personal equitation to the job | – 1,15 (0,255) | 0,43 (0,732) | 1,91 (0,133) | 1.29 (0.281) | *d* = 3,61 (0,053) | 1,00 (0,421) |
| | | Effective workload | – 1,38 (0,170) | 0,83 (0,481) | 1,00 (0,398) | 0.28 (0.892) | 2,96* (0,016) | 2,14 (0,068) |
| | | Opinion about financial acknowledgment | – 1,02 (0,312) | 0,36 (0,785) | 1,68 (0,177) | 1.12 (0.352) | 0,75 (0,591) | 0,83 (0,533) |

| Stress scales 2018 | | | Physical activity | | Smoking | | Alcohol consumption | |
|---|---|---|---|---|---|---|---|---|
| | | | Regularity | Frequency | Status | Cigarette per day | Drinking | Binge Drinking |
| | | | t (p) | F (p) | F (p) | F (p) | F (p) | F (p) |
| RMSK | Workload factors | Opinion about personal responsibility | – 2,03* (0,045) | 1,78 (0,157) | 0,92 (0,437) | 0.14 (0.968) | 3,00* (0,015) | 2,14 (0,069) |
| | | Opinion about organizational expectations | – 1,27 (0,208) | 0,61 (0,610) | 2,51 (0,064) | 0.29 (0.883) | 4,12* (0,032) | 1,06 (0,387) |
| | | Opinion about the position in the organization | – 1,54 (0,127) | 1,10 (0,352) | *d* = 2,59 (0,080) | 0.67 (0.613) | 1,31 (0,266) | 1,29 (0,276) |
| | Individual, personal factors | Health status | – 2,22* (0,029) | 1,64 (0,185) | 2,29 (0,084) | 1.96 (0.108) | 3,10* (0,013) | 3,68** (0,005) |
| | | Internal vs. external control | 1,40 (0,165) | 0,90 (0,445) | 1,84 (0,147) | 2.23 (0.073) | 0,78 (0,570) | 0,73 (0,606) |
| | | Type A or Type B personality | – 1,48 (0,144) | 4,44** (0,006) | 1,34 (0,266) | 0.57 (0.687) | 1,32 (0,262) | 2,32 (0,051) |
| | | Activity | – 0,79 (0,432) | 0,96 (0,413) | 0,07 (0,974) | 1.26 (0.294) | 0,36 (0,873) | 0,33 (0,893) |
| | | Motivation | – 0,51 (0,612) | 0,72 (0,541) | 0,42 (0,740) | 0.16 (0.957) | 1,27 (0,283) | 1,33 (0,259) |
| | | Social support | 1,41 (0,161) | 1,83 (0,147) | 2,48 (0,067) | 2.58* (0.043) | 0,66 (0,654) | 0,76 (0,578) |
| | | Social support – Person | 0,16 (0,877) | 0,39 (0,764) | *d* = 1,10 (0,374) | 3.33* (0.014) | 1,60 (0,168) | 2,17 (0,065) |
| | | Stress reduction | – 0,26 (0,799) | 0,76 (0,521) | 2,14 (0,101) | *d* = 1.08 (0.396) | 0,33 (0,896) | 1,01 (0,417) |
| | **Workplace stress index** | | – 1,28 (0,203) | 0,73 (0,535) | 1,82 (0,150) | *d* = 1.99 (0.143) | 1,72 (0,140) | 1,23 (0,303) |
| **PSS** | | | – 1,53 (0,129) | 1,39 (0,252) | 2,60 (0,057) | 1.88 (0.122) | 0,97 (0,438) | 1,49 (0,205) |

*Table 5* provides an overview of the quantity of statistically significant differences (correlations) between WISDM-37 and RMSK subscales.

These significant differences are more interesting from the aspect of RMSK subscales. Only two subscales of Workload factors (it has 17 subscales) and four subscales of Individual, personal factors (it has eight subscales) did not connect to WISDM-37 subscales in 2016: Work-related events, Opinion about working hours, Type A or Type B personality, Activity, Social support, and Stress reduction. However, the analysis showed significant relation in fewer cases at class 2018: only four subscales of Workload factors and one subscale of Individual, personal factors had a connection to WISDM-37 subscale – Subjective opinion about direction, Ethical aspects of the work, Personal equitation to the job, Effective workload and Type A or Type B personality. The intensity of correlations was in a narrower region, but with a little higher means in 2018. The absolute values of correlations were between 0.36 and 0.50 this year, but amongst 0.26 and 0.57 in 2016.

Table 5 *The quantity of the statistically significant relationship between WISDM-37 and stress scales*

| WISDM-37 subscales | RMSK factors | | | | | | PSS |
|---|---|---|---|---|---|---|---|
| | Workload | | Individual, personal factors | | Work stress index | | |
| | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | (only in 2018) |
| Affiliative attachment | 11 | 0 | 1 | 1 | 0 | 0 | 0 |
| Automaticity | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Loss of control | 6 | 0 | 1 | 1 | 0 | 0 | 0 |
| Cognitive enhancement | 11 | 0 | 1 | 0 | 0 | 0 | 0 |
| Craving | 9 | 0 | 1 | 1 | 0 | 0 | 0 |
| Cue exposure/associative process | 9 | 1 | 0 | 0 | 0 | 0 | 0 |
| Social/environmental support | 8 | 0 | 2 | 0 | 0 | 0 | 0 |
| Taste | 6 | 1 | 1 | 1 | 0 | 0 | 0 |
| Tolerance | 4 | 0 | 1 | 0 | 0 | 0 | 0 |
| Weight control | 15 | 3 | 1 | 0 | 0 | 0 | 0 |
| Affective enhancement | 8 | 0 | 1 | 0 | 0 | 0 | 0 |

## Alcohol Consumption

*Table 2* and *Table 3* include results from group comparison concerning frequency of alcohol consumption and binge drinking. The frequency of alcohol consumption showed significant differences in RMSK subscales in class 2016. The post hoc analysis suggested that the group of weekly and daily drinking alcohol felt more overload than the others in these subscales:

- Type A or Type B personality ($F = 2.34$, $p = 0.045$);
- Activity ($F = 3.38$, $p = 0.007$);
- Social support ($F = 2.42$, $p = 0.039$);
- Social support-Person ($d = 4.80$, $p = 0.005$).

With regard to binge drinking, two statistically significant differences were found in class 2016. The group of daily binge drinking reported a significantly lower level of Activity

($F=2.56$, $p=0.031$) than the group of never binge drinking or rare binge drinking. In addition, the group of never binge drinking showed greater Social support ($F=2.79$, $p=0.020$) than the group of daily binge drinking. It needs to be highlighted that alcohol consumption had a significant difference only with Individual, personal factors, but not connected with the Workload factors.

The analysis showed significant differences in the RMSK subscale eleven times in the frequency of alcohol consumption at class 2018:

- Work-related events ($d=4.35$, $p=0.033$);
- Subjective opinion of workload ($F=2.59$, $p=0.031$);
- Workload from the characteristic of the organization ($d=13.52$, $p=0.000$);
- Subjective opinion about direction ($F=2.33$, $p=0.049$);
- Complex opinion about workload ($F=2.42$, $p=0.042$);
- Opinion about conveniences of the workplace ($d=3.93$, $p=0.043$);
- Opinion about working hours ($F=3.03$, $p=0.014$);
- Effective workload ($F=2.96$, $p=0.016$);
- Opinion about personal responsibility ($F=3.00$, $p=0.015$);
- Opinion about organizational expectations ($d=4.12$, $p=0.032$);
- Health status ($F=3.10$, $p=0.013$).

The post hoc analysis suggested that the groups of "weekly" and "several times a week drinking alcohol" reported higher overload in these subscales.

Binge drinking had only three significant connections to RMSK subscales in class 2018:

- Opinion about working hours ($F=2.47$, $p=0.039$);
- External opinion about the workplace ($F=2.41$, $p=0.043$);
- Health status ($F=3.68$, $p=0.005$).

Post hoc analysis showed that the differences were most intense between the extremes of binge drinking.

With regard to PSS, a statistically significant difference was not found in the examined health behaviours in class 2018.

## Health Orientation

Table 6 *The quantity of the statistically significant relationship between HOS and stress scales*

| HOS subscales | RMSK factors | | | | | | PSS |
|---|---|---|---|---|---|---|---|
| | Workload | | Individual, personal factors | | Work stress index | | |
| | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | (only in 2018) |
| Personal Health Consciousness | 1 | 0 | 2 | 1 | 0 | 0 | 1 |
| Health Image Concern | 0 | 1 | 3 | 1 | 0 | 1 | 0 |
| Health Anxiety | 11 | 10 | 5 | 0 | 0 | 1 | 0 |
| Health-Esteem and Confidence | 9 | 2 | 3 | 1 | 0 | 1 | 1 |
| Motivation to Avoid Unhealthiness | 1 | 0 | 1 | 1 | 0 | 0 | 0 |

| HOS subscales | RMSK factors | | | | | | PSS |
|---|---|---|---|---|---|---|---|
| | Workload | | Individual, personal factors | | Work stress index | | |
| | 2016 | 2018 | 2016 | 2018 | 2016 | 2018 | (only in 2018) |
| Motivation for Healthiness | 3 | 0 | 1 | 1 | 0 | 0 | 0 |
| Internal Health Control | 6 | 1 | 2 | 1 | 1 | 0 | 1 |
| External Health Control | 11 | 0 | 4 | 2 | 0 | 0 | 0 |
| Health Expectations | 11 | 7 | 3 | 3 | 0 | 0 | 1 |
| Health Status | 12 | 11 | 3 | 2 | 0 | 0 | 1 |

*Table 6* presents the quantity of statistically significance difference (correlations) between HOS and RMSK subscales. There is some curiosity from the aspects of the RMSK subscale. Ethical aspects of the work were the one and only in 2016, which did not show any connections to the HOS subscale. But five RMSK subscales were without relation with HOS subscales in 2018: Subjective opinion about the workplace atmosphere; Opinion about working hours; Ethical aspects of the work; Social support; Social support – Person. In addition, the Stress reduction subscale had nine significant connections from ten cases to the HOS subscale in class 2016, however, the Activity subscale had the most relation with seven cases from ten in 2018. There were three or four connections on average (exactly 3.58) between RMSK subscales and HOS subscales in 2016, but there were only 1-2 connections on the average (exactly 1.85) in 2018. The intensity of correlations was amongst 0.18 and 0.39 in absolute value in class 2016 but it was amongst 0.21 and 0.46 in class 2018. So the connections between RMSK subscales on the one hand and HOS subscales on the other were a little stronger in 2018 although there were fewer connections than in 2016.

## DISCUSSION

This was a rare study that attempted to show the potential curiosities and questions, the connection between occupational stress and health behaviour among police trainees.

Regarding physical activity, we can assess that the expected physical activity was present for the appropriate fitness in 2016. But the diverse rates of the two classes had an effect on the relationship between occupational stress and physical activity. Because of it, we cannot make an obvious statement that physical activity is connected to the level of occupational stress, because the two classes had a different patterns of results. But it is not negligible in the findings of other research about Swiss police officers which showed that regular physical exercise could protect from the negative health consequences of the occupational stress[21].

In this study, we did not find the previously showed results[22] about the relationship between smoking and occupational stress. We got a mixed picture about the frequency of alcohol consumption because the results of class 2018 were in accordance with international

[21] Gerber et al. "Do exercise and fitness buffer against stress among Swiss police and emergency response service officers?" *Psychology of Sport and Exercise* 11/4. 2010. 286-294.

[22] Smith et al. "Alcohol and Tobacco Consumption…" 63-65.; McCarty, Zhao and Garland. "Occupational stress…". 672-691.

findings,[23] but the result of class 2016 was not. (The analysis suggested there were connections to the Individual, personal factors, but not to the Workload factors.)

The reason for this discrepancy could be the specialty of our study sample compared to the sample of international research. These projects had higher average age and more years in service than the trainees in this study. But because of it, our study could be important for the future because the information about young probation police officers could support to create of organizational policy and shape human resource management especially if we remember the specialties of generation Z[24].

The results of this study could be a guideline for the Hungarian police psychologists to the psychological work with these young people and for the planning of some events in the Life-Strength-Health Program (the health care and health promotion program at Hungarian Police). If we shape the health promotion program for the target audience better, the expected effect will happen more likely. And this approach could be of assistance to strengthen retention among young police officers and propose the necessity of the health care actions in the training.

The results could be useable for the Hungarian Defence Forces because of two main reasons. The first is that generation Z will become soldier soon, and the behaviour of police trainees and young soldiers could be similar. The other reason is that in the last few years, police and defence forces have worked together, and the knowledge of the behaviour and the thinking of police trainees may be helpful in further collaboration.

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