

Job satisfaction and turnover intentions of correctional officers in a Prague prison*

Marek Botek**

Abstract

Job satisfaction is one of the most researched phenomena. But I am not aware of a study that assesses job satisfaction in Czech prisons despite the fact that it is a specific job with high physical and mental demands in a potentially dangerous environment. The purpose of this paper is to create a model describing job satisfaction and verify the anticipated relationship between job satisfaction and turnover of Prague correctional officers.

While the relationship between job satisfaction and turnover intentions has been confirmed, the anticipated strong relationship between supervisor support and correctional officer job satisfaction has not been confirmed. Descriptive statistics have also revealed the surprising fact that the employees with the lowest tenure have the weakest turnover intentions.

Keywords: Job satisfaction; Correctional Officers; Prague Prison; Turnover Intention; Supervisor Support

JEL codes: J28, M54

Introduction

Job satisfaction is one of the most researched phenomena in psychology of human resources management (Wnuk 2017). The research focuses on job satisfaction in various environments, including prisons. Employees working in prisons usually need to cope with a wide range of work conditions including demanding requirements, hard work, insufficient information for decision making, insufficient resources and pay, weak feedback, bad physical conditions at work, demanding emotional requirements, work tension and aggression and dangerous inmates (Bourbonnais/Jauvin/Dussault/Vézina 2007; Hartley/Davila/Marquart/Mullings 2013; Harvey 2014; Jaskowiak/Fontana 2015; Kazmi/Singh 2015; Kinman/Clements/Hart 2016).

Cullen, Link, Wolfe, and Frank (1985) remark that correctional officers (COs) should be viewed differently from those in other occupations in the sphere of correctional work as they work in an unusual social environment and they have unusual technical means. According to Gerstein, Topp and Correll (1987), COs have higher levels of stress than employees working in non-custody positions at prisons.

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** Botek, Marek, PhD., Assistant Professor, Department of Economics and Management, University of Chemistry and Technology Prague, the Czech Republic; marek.botek@vscht.cz. Research interests: Human Resources Management, Satisfaction and Education of Employees.

Although research on CO job satisfaction has been going on for a rather long time (see, *inter alia*, Hepburn/Knepper 1993), this issue is still topical, and it ranks among the top research intents, also in the sphere of correctional workers (Castle 2008).

The number of prisoners has risen dramatically in the past couple of years, while the number of people working in prison service has dropped; this has resulted in many prisons being overcrowded (Pitts/Griffin/Johnson 2014). Prisons in the Czech Republic were completely full at 109 % of capacity at the end of 2017 (Vězeňská služba 2018). By the end of 2018, it decreased to 102.5 % of capacity (Word Prison Brief 2018). According to the same source, full capacity was exceeded in six other European countries at the end of 2018 (Belgium and Serbia 109 %; Romania, France, Italy, and Hungary 114–118 %). That implies that prison employees have many more duties and much more responsibility than before. Also, the role of COs has recently changed rather significantly. Deguchi, Inoue, Muramatsu, Iwasaki, Yamauchi, Nakao and Kiriike (2013) assert that COs maintain order and safety in prisons. However, their job is more complex. COs have to maintain prison safety and security while taking care of the prison population, participating in their rehabilitation programme and providing client services (Bourbonnais et al. 2007; Finney/Stergiopoulos/Hensel/Bonate/Dewa 2013). The working requirements in prisons may result in job burnout, which causes a drop in productivity, turnover intentions and turnover (Lambert/Hogan/Barton-Bellessa/Jiang 2012 a).

With respect to the nature of working in prisons, a lot of research focuses on stress. Kunst (2011) has found 30 studies related to various stress factors in the Web of Science (WoS) database; Senol-Durak/Durak/Gençöz (2016) and Finney et al. (2013) have examined job stress; Deguchi et al. (2013) have examined stress and depressive symptoms; Bourbonnais et al. 2007 as well as Harvey (2014) have researched mental distress. Castle (2008) has performed a meta-analysis of the literature, which reveals that job satisfaction and job stress are typically assessed as separate dependent variables.

This study focuses on job satisfaction and relevant turnover intentions of COs in a specific Czech prison. The purpose of this article is to explain the significance of selected predictors of job satisfaction and verify the relationship between satisfaction and turnover intentions. The novelty of this article lies in its focus. None of the articles that we have found on the WoS for 2004–2018 addressed dissatisfaction in Czech prisons. Although entering the keywords “Correctional Officers” and “satisfaction” returned 355 unique results, none of them were written by Czech authors or were from the Czech Republic. With respect to the facts that Czech prisons are overcrowded, there is a shortage of COs (576 people short of the planned number of 7,625 COs) and only one out of seven applicants pass the tests (Vězeňská služba 2018), COs’ current satisfaction and particularly

their turnover intentions are serious issues. CO satisfaction has not been researched in other Central or Eastern European countries yet. Out of the 355 articles found, only 3 were from Slovenia and only one of them dealt with CO life satisfaction at prison. The Czech Republic shares a common socialist past with other Central and Eastern European countries, the links being dependence on the Soviet Union and the application of similar rules. One example is the Soviet prison model with group accommodation in larger cells. It is still common in the Czech Republic, although prisons are being modernized in accordance with the current requirement for smaller cells that ensure at least 4 m² per prisoner (Vězeňská služba 2018). Central and Eastern European countries also have a high incarceration rate. The median number of prisoners per 100,000 inhabitants is 173 in this region, whereas in Western Europe it is only 80.5 (Word Prison Brief 2018). The high incarceration rate means a need for more COs, which intensifies the need to ascertain the causes of their potential turnover. This common past makes it possible to apply the results of this study in other Central and Eastern European countries that are on a similar level of transformation.

This article is structured in the following way: the first part presents what is currently known about job satisfaction and its relationship to turnover. The second part describes the research methods used, and the third part presents the results followed by discussion and a conclusion.

Literature overview

Many studies have focused on job satisfaction predictors. Sengupta (2011) defines 15 organizational factors and marks interpersonal relationships, career advancement, salary, sex, responsibility and authority as significant determinants. The Hartley et al. (2013) study examines the importance of selected individual and work-related factors as predictors of CO job stress and job satisfaction. The individual variables include demographic attributes such as sex, race, marital status, age, education and income. The job attributes include the current job position, level of prison security, type of work contract and expectation of supervisor support. Although Hartley et al. (2013) state that satisfaction depends on race, sex, level of education and tenure, the only significant variable that has been confirmed in research by Castle (2008) is the level of education, which negatively correlates to job satisfaction. Lambert (2004) and Griffin (2001) have not confirmed any relationship between gender and job satisfaction either. Dobrin, Smith, Peck and Macara (2016) state that studies focused on the influence of gender on CO job satisfaction were not conducted until the number of women working in prisons increased. However, the number of women is still rather low and their job satisfaction may be influenced by fewer opportunities for promotion when compared with men (Lambert/Paoline, 2008). The impact of age on job satisfaction is not unambiguous. Sengupta (2011) states that satisfaction is

affected by different aspects in different age categories. Griffin, Bayl-Smith and Hesketh (2016) have found that older employees perceive more discrimination, which decreases their job satisfaction. Luchman, Kaplan and Dalal (2012) state that older employees need less satisfaction to tick the answers “strongly agree” or “agree” in the questionnaire.

García-Bernal, Gargallo-Castel, Marzo-Navarro and Rivera-Torres (2005) define four factors as satisfaction predictors: economic aspects, interpersonal relationships, work conditions and personal fulfilment; Kara, Uysal and Magnini (2012) also define four factors: management conditions, use of one’s abilities at work, work conditions and personal fulfilment. Brough and Williams (2007) predict job satisfaction using work requirements that they have investigated using the Job Demand-Control-Support (JDCS) model with 132 Australian COs.

Kinman et al. (2016) discover that the opportunity to manage one’s job seems to be a significant component of intrinsic satisfaction, whereas job requirements have a strong impact on satisfaction with extrinsic aspects of the job. In their study, the level of intrinsic and extrinsic job satisfaction is lower than the results shown for other jobs in emergency and security. This contradicts previous research that has found a high degree of job satisfaction among COs (Leip/Stinchcomb 2013).

Kazmi and Singh (2015) research job satisfaction using another widely-used questionnaire, the abridged Job Descriptive Index, which measures satisfaction via five subscales: salary, the possibility of promotion, colleagues, supervisor and work as such. The results show that unsatisfactory work conditions as the result of insufficient physical conditions led to emotional distress and dissatisfaction. Also, Bourbonnais et al. (2007) confirm the relationship between depressive symptoms and the physical environment, amount of work and lower peer social support. On the contrary, CO satisfaction was enhanced when they felt like they were doing meaningful work (the reintegration of inmates back into society) and by peer relationships (Jaskowiak/Fontana, 2015).

Therefore, relationships and social support at work could be a factor that affects satisfaction. Lambert et al. (2012 a) confirm that workers who believe that their supervisor supports them score a lower degree of burnout. They have also discovered that job feedback has a negative influence on emotional burnout, even when the impact of supervision is insignificant (Lambert/Hogan/Dial/Jiang/Khodaker 2012 b).

The influence of supervisor support on job satisfaction has been confirmed by Hartley et al. (2013) and Kinman et al. (2016). Castle (2008) has found many studies that include supervisor support among the predictors of job satisfaction. Brough and Williams (2007) also demonstrate that supervisor support moderates

the relationship between job requirements and job satisfaction. All these findings lead to the following two research questions.

The quoted publications analyse factors, but they usually do not come up with a unifying theory. The theory of job satisfaction may be inferred from Herzberg's views on motivation. In this case, three dimensions can be distinguished – success, acknowledgement and the nature of the work (Herzberg, 2003; article reprint from 1986). Job satisfaction is also closely linked to motivation theories regarding needs. If a need remains unsatisfied, it evokes striving for satisfaction. Needs that are sufficiently satisfied over the long term lose their motivational values. A typical example is Maslow's hierarchy of needs. Satisfaction with the fulfilment achieved for a particular level (e. g. the need for safety) allows an individual to then strive to satisfy the next level (e. g. belongingness needs). Nevertheless, Maslow's theory is not as unambiguous as it is often portrayed to be. Some individuals saturate higher needs without meeting lower needs. For instance, some firefighters, policemen and COs do not saturate their need for safety while they satisfy their need for belongingness or even the highest need of self-actualization. We can often witness behaviour spurred by needs from several different levels, although the basic principle of Maslow's theory speaks of gradual saturation of the levels going from bottom to top. Herzberg distinguishes between two types of motivating factors: motivators (e. g. challenging work, recognition for one's achievements, responsibility, a sense of importance to an organization) that impart positive satisfaction and hygiene factors (e. g. job security, salary, work conditions) that do not impart positive satisfaction or lead to higher motivation, though dissatisfaction results from their absence.

Research question 1: Which components are significant for correctional officer job satisfaction?

Research question 2: Which components saturate correctional officer job satisfaction with supervisor support?

It is only logical to expect that while a satisfied employee wants to stay with a company, a dissatisfied employee will think about changing jobs. That could be a change within the company (switching positions, acquiring new competences, etc.) or a decision to leave the employer. Authors usually distinguish between turnover, i. e. when employees (typically) leave companies voluntarily (Brewer/Kovner/Greene/Tukov-Shuser/Djukovic 2012), and turnover intentions. Intentions are the determination to leave one's job (Aydogdu/Asikgil 2011; Saeed/Waseem/Sikander/Rizwan 2014) and are a predictor of actual turnover (Griffeth/Hom/Gaertner 2000). Turnover, meaning the fluctuation in the number of employees, was already being researched a hundred years ago (Slichter 1919) and it is still being researched today. Undesirable turnover connected to employ-

ee shortages distorts production flow and service quality (Lee 2010) and, in the case of prisons, it may jeopardize security in the prison and its vicinity.

A detailed overview of studies that deal with predictors of turnover and turnover intentions has been compiled by Kaya and Abdioglu (2010). The predictors were job satisfaction, gender and age. Liu, Cai, Li, Shi and Fang (2013) has found that leadership style, i. e. leader-member exchange, can have a significant effect on employee turnover. Similarly, Cotton and Tuttle (1986) and Korff, Balbo, Mills, Heyse and Wittek (2015) confirm that turnover is influenced by job satisfaction, satisfaction with salary, the work and the possibility of promotion. Also, Castle (2008) writes that job satisfaction is used as a predictor of many dependable variables including job turnover.

The significant negative correlation between job satisfaction and turnover intentions has been confirmed, e. g. by Saeed et al. 2014; Brewer et al. 2012; Tett/Meyer 1993; and Tschopp/Grote/Köppel (2016). Alexandrov, Babakus and Ugur (2007) point out that the relationship is significant but weak. Other authors assert that dissatisfaction is just one of many reasons for turnover (Dubey/Guneseckaran/Altay/Childe/Papadopoulos 2016). Likewise, Allen, Bryant and Vardaman (2010) claim that dissatisfaction is the primary cause for only one of the three types of job-hoppers.

Alexandrov et al. (2007) discover that the influence of job satisfaction on turnover intentions is primarily transferred through affective organizational commitment. The validity of this presumption concerning COs has also been confirmed by Lambert and Hogan (2009).

The relationship between turnover intentions and CO satisfaction has been investigated by many authors. Hartley et al. (2013) report that job dissatisfaction may result in serious consequences for a correctional facility such as absenteeism and CO turnover. Kinman et al. (2016) claim that a decrease in job satisfaction predicts turnover intentions. This conclusion has been confirmed by a study conducted by Leip and Stinchcomb (2013) of approx. 2,000 employees working on the front line in U.S. prisons that revealed a high degree of job satisfaction and low turnover intentions.

The previous overview clearly shows that satisfaction/dissatisfaction has been confirmed as a predictor of turnover, but it is probably not the only cause. Nový, Surynek, Kašparová and Šindelářová (2006) claim that turnover intentions depend on three groups of factors: external, in-company and personality. Among the external factors the author lists, above all, supply and demand on the labour market. As the in-company factors, the author mentions pay, work organization, interpersonal relationships, etc. The personality factors include, according to Nový et al. (2006), sex, age, education, tenure and other factors. In-company

and personality factors may influence job satisfaction as well as turnover intentions.

Age or, more precisely, tenure plays a specific role among independent variables. Tschop et al. (2016) have conducted a meta-analysis, and they refer to research indicating that turnover intentions and actual turnover are lower for older employees, which confirms the conclusion of an older meta-analysis (Porter/Steers 1972) claiming that young employees with low tenure have the greatest turnover, whereas with older ones with longer tenure there is an increase in absenteeism. The influence of age and tenure on turnover has also been confirmed by Cotton and Tuttle (1986) and later by Griffeth et al. (2000). However, Kaya and Abdioğlu (2010) have found that although those aged 40 and over are less likely to leave an organization, the difference is not statistically significant. Age is believed to increase turnover until a certain age, after which turnover intentions reduce with increasing age (March/Simon 1958).

The physically and mentally demanding nature of CO work in prisons is likely to result in an increase in turnover tendencies of employees as they become older. This trend could distort the effect of the pension that COs in Czech prisons are entitled to after having worked for 15 years, which is paid to them annually until they reach retirement age. Some COs might postpone their decision to leave for a year or even longer so that they qualify for the pension (Zákon, 2003). Nevertheless, when they continue to work after the 15th year, the pension representing 20 % of their gross monthly salary increases every year. For the 16th and each year thereafter until 20 years of tenure, it is 3 % each year, and for the 21st and each year thereafter until 25 years of tenure, it is 2 %. That means that if COs leave after 23 years, their pension is 41 % ($20+3+3+3+3+3+2+2+2$ %). If they stay longer than 25 years, the pension increases for each year completed by 1 % up to 50 % of their gross monthly salary (Zákon, 2003). This means that future income in the form of pensions continues to increase up to 30 years of tenure.

In the literature, we can find arguments based on instrumentality theory proposed by, for example, Skinner, Taylor and Ford in the early to mid-20th century. In this vein, Ehrenberg and Smith (1985) claim that higher salaries can be used as a tool to reduce voluntary turnover. Also, Ghebregiorgis and Karsten (2007), based on a study conducted in Eritrea, suggest that employee turnover decreases as the firm's compensation package increases. In addition to examining the factors affecting fluctuations in turnover, authors have also tried to develop explanatory theory. In order to understand the reasons for turnover, I could once again use Herzberg's theory in cases where hygiene factors are not saturated. This would lead to dissatisfaction, and one of the possible solutions for a CO would be the termination of employment. If dissatisfaction is not too big and insolvable, it is only demonstrated in verbalized turnover intentions.

Research question 3: Is there a relationship between correctional officer job satisfaction and turnover intentions?

Research question 4: Which factors are significant for CO turnover intentions?

Methodology

On the basis of the research structure used by Saunders, Lewis and Thornhill (2009), I made the following decisions: positivism was chosen for the research philosophy, while deduction was applied as the research approach. In the following step, a survey was chosen as the research method, and it was decided for a mono-methodical survey with a cross-sectional time horizon.

It was decided not to use the standardized Minnesota Satisfaction Questionnaire (MSQ) because of its extent (100 items). A manual for measuring and assessing employee job satisfaction (Manual ..., 2007) issued by the Research Institute for Labour and Social Affairs was used in a shortened and modified form.

The survey was conducted in a medium-sized Czech prison. Paper-based questionnaires were handed out to all 110 guards and officers in the prison. The survey was conducted between 1 June and 27 June 2016, and 99 completed questionnaires were obtained (a return rate of 90 %). The first part consisted of demographic questions, the second part of 22 closed questions using a 5-degree Likert scale “definitely yes – definitely not”. The demographic data included sex, age, education and tenure. The following statements were used as dependent variables for the hypotheses: (A) *Are you generally satisfied with the job that you do?*; (B) *Are you satisfied with your supervisor?* and (C) *Have you thought about changing your job in the near future?* Subsequently, the statements were analysed to determine which of the selected independent variables influenced them.

Analysis of variance with the gradual elimination of the most insignificant independent variables was used as well as the contingency table chi-square test and the Kolmogorov-Smirnov test for assessing the relationship between satisfaction and turnover intentions. The sample is described in Table 1.

Table 1: Descriptive statistics

| Variable | Description of Variable | Min | Max | Median | Mean | SD |
|---------------------------------|---|-----|-----|--------|-------|-------|
| Age | Measured in years | 22 | 67 | 30.77 | 32.77 | 10.06 |
| Educational level | 68 % high school (coded 0); 26 % Bc (coded 1); 6 % MSc. (coded 2) | 0 | 2 | 0 | 0.38 | 0.59 |
| Gender | 17 % women (coded 0); 83 % men (coded 1) | 0 | 1 | 1 | x | x |
| Tenure | years working at facility | 0 | 26 | 5.64 | 8.15 | 5.65 |
| N = 99; SD = standard deviation | | | | | | |

Results

In order to verify the first research question, statements were selected as independent variables for the dependent variable ((A) *Are you generally satisfied with the job that you do?*). The statements and regression coefficients are shown in Table 2. The model is significant, p -value $<.001$, $R^2 = .526$, $R^2_{adj} = .484$.

Table 2: Parameter estimates for Model 1

| Model ^a | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| (Constant) | -.325 | .377 | | -.861 | .391 |
| Are you satisfied with social and hygienic facilities? | -.037 | .086 | -.041 | -.435 | .665 |
| Are you satisfied with your salary? | .140 | .088 | .146 | 1.604 | .112 |
| Are you satisfied with your working hours? | .284 | .090 | .262 | 3.169 | .002 |
| Are you satisfied with your job content? | .341 | .110 | .318 | 3.095 | .003 |
| Are you satisfied with peer relationships at work? | .291 | .084 | .320 | 3.468 | .001 |
| Are you satisfied with your supervisor behavior? | -.050 | .087 | -.060 | -.575 | .567 |
| Are you satisfied with the organization's management? | .098 | .097 | .103 | 1.011 | .315 |
| Are you satisfied with the quality of meals provided by your employer? | -.003 | .077 | -.004 | -.042 | .966 |
| a. Dependent Variable: Are you generally satisfied with the job that you do? | | | | | |

After the least significant items were gradually eliminated, the final model was created. The regression coefficients are shown in Table 3. The model is significant, p -value $<.001$, $R^2 = .519$, $R^2_{adj} = .499$.

In Model 1, 5 (out of 8) independent variables did not have a significant relationship to the dependent variable. Through elimination, a model was created containing four significant items. General job satisfaction in the Czech prison where the research was conducted is saturated with satisfaction with working hours, job content, interpersonal relationships and pay. What is interesting is that satisfaction with supervisor behaviour and satisfaction with the organization's management were not assessed as significant predictors of job satisfaction. This finding is in contrast with conclusions that Castle (2008) and others (Hartley et al. 2013; Kinman et al. 2016) have found in the literature.

Table 3: Parameter estimates for Final Model 1

| Model ^b | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| (Constant) | -.255 | .330 | | -.773 | .442 |
| Are you satisfied with your salary? | .162 | .075 | .168 | 2.172 | .032 |
| Are you satisfied with your working hours? | .276 | .086 | .255 | 3.203 | .002 |
| Are you satisfied with your job content? | .321 | .100 | .300 | 3.217 | .002 |
| Are you satisfied with peer relationships at work? | .281 | .073 | .309 | 3.841 | .000 |
| b. Dependent Variable: Are you generally satisfied with the job that you do? | | | | | |

What proved to be significant were particular items that can be considered hygiene factors according to Herzberg's theory such as working hours, job content and salary. In contrast, supervisor support and organizational management, which may be classified as motivators, were not significant. They are probably not sufficiently saturated. With respect to the fact that when hygiene factors are saturated, their influence on satisfaction ceases to exist (Herzberg 2003; article reprint from 1986), one can consider hygienic conditions and meals in the researched prison to be satisfactorily saturated. These predictors were not significant for job satisfaction.

The dependent variable chosen for the second research question was supervisor satisfaction ((B) *Are you satisfied with your supervisor?*). The overview of statements and regression coefficients are shown in Table 4. The model is significant, $p\text{-value} < .001$, $R^2 = .813$, $R^2_{\text{adj}} = .805$.

Table 4: Parameter estimates for Model 2

| Model ^c | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| (Constant) | -.015 | .148 | | -.100 | .920 |
| Can your supervisor tell you the necessary information in a precise and timely manner? | .251 | .096 | .238 | 2.605 | .011 |
| Does your supervisor have good organizational skills? | .334 | .091 | .342 | 3.674 | .000 |
| Can your supervisor appreciate your work? | .324 | .076 | .308 | 4.259 | .000 |
| Can your supervisor assign and define your work? | .130 | .070 | .114 | 1.859 | .066 |
| c. Dependent Variable: Are you satisfied with your supervisor? | | | | | |

The independent variable *Can your supervisor assign and define your work?* proves to be insignificant, which is why it was eliminated, and the resulting model is shown in Table 5. The model is significant, $p\text{-value} < .001$, $R^2 = .806$, $R^2_{\text{adj}} = .800$.

Table 5: Parameter estimates for Final Model 2

| Model ^d | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| (Constant) | .048 | .146 | | .330 | .742 |
| Can your supervisor tell you the necessary information in a precise and timely manner? | .301 | .094 | .285 | 3.218 | .002 |
| Does your supervisor have good organizational skills? | .342 | .092 | .350 | 3.721 | .000 |
| Can your supervisor appreciate your work? | .354 | .075 | .336 | 4.699 | .000 |
| d. Dependent Variable: Are you satisfied with your supervisor? | | | | | |

Out of four independent variables that were anticipated to saturate supervisor satisfaction, three proved to be significant: the supervisor's ability to communicate the necessary information, the supervisor's organizational skills and the supervisor's appreciation for the employees' work.

Supervisor support is one of Herzberg's motivators, which is why the confirmation of the significance of three out of four items testifies to their good work. That means that they are fully interested in their subordinates.

A contingency table chi-square test was used to test research question 3. The variables were (A) *Are you generally satisfied with the job that you do?* and (C) *Have you thought about changing your job in the near future?* Groups rated how they felt from strongly agree (1) to strongly disagree (5).

The test criterion $G = 60.697$ is higher than the critical value $\chi(1-\alpha)$; $df = 26.296$, so I can refuse the zero hypothesis (H_0) regarding the independence of the aspects on a 5 % level of significance. However, the conditions for expected frequency were not met (always higher than 1 and at least 80 % higher than 5), which is why the result is not significant. The conditions were still not met when the category "definitely yes" was merged with "yes" and "definitely not" was merged with "not". In this case, the test criterion 35.74 was higher than the critical value of 9.49. After eliminating the "I don't know" category, the test criterion was 47.7, which is higher than the critical value (16.92). Nevertheless, the required conditions for relative frequency were not met even in this case. The conditions were only met after the answer "I don't know" was eliminated and the affirmative and disapproving categories were merged (see Table 6).

Table 6: Chi-square test for Final Model

Actual values

| | var. B – gr1 | var. B – gr2 | total |
|------------------|--------------|--------------|-------|
| var. A – group 1 | 12 | 44 | 56 |
| var. A – group 2 | 21 | 4 | 25 |
| total | 33 | 48 | 81 |

Expected values

| | var. B – gr1 | var. B – gr2 |
|------------------|--------------|--------------|
| var. A – group 1 | 22.81 | 33.19 |
| var. A – group 2 | 10.19 | 14.81 |

The test criterion $G = 28.002$ is higher than the critical value $\chi(1-\alpha)$; $df = 3.481$, which is why the zero hypothesis (H_0) regarding the independence of the features at a 5 % value of significance can be refused.

A non-parametric Kolmogorov-Smirnov test was used to reinforce the refusal of the independence hypothesis. Its results are shown in Table 7.

Table 7: Kolmogorov-Smirnov test

| | actual frequencies | | relative frequencies | | differences |
|----------------|--------------------|----------|----------------------|----------|-------------|
| | satisfaction | turnover | satisfaction | turnover | |
| definitely yes | 14 | 11 | 0.14 | 0.11 | 0.03 |
| yes | 53 | 25 | 0.68 | 0.36 | 0.32 |
| undecided | 5 | 15 | 0.73 | 0.52 | 0.21 |
| not | 19 | 28 | 0.92 | 0.8 | 0.12 |
| definitely not | 8 | 20 | 1 | 1 | 0 |

The critical value = 0.193 is lower than the biggest difference detected, which is why the hypothesis that satisfaction and turnover are from the same basic sample is refused.

When using inverse values for turnover (i. e. when merging “definitely yes” for satisfaction and “definitely not” for turnover, etc.), I cannot refuse the hypothesis that satisfaction and “inverse turnover” come from the same basic set on a $\alpha=0.05$ level of significance. The critical value = 0.193 is higher than the highest difference detected (0.18), which means that the hypothesis that satisfaction and “inverse turnover” are from the same basic set cannot be rejected. This confirmed the relationship between turnover and job satisfaction in COs in the prison where the research was conducted. These conclusions are in line with previous research (Castle 2008; Hartley et al. 2013; Kinman et al. 2016).

But this relationship can be spurious because of mutual predictors of satisfaction and turnover tendencies. In order to verify this possibility, Model 5 was created. All independent statements from Model 1 (the basic satisfaction model) were used; the dependent variable was ((C) *Have you thought about changing your job in the near future?*). The model is significant, $p\text{-value} = .006$, $R^2 = .223$, $R^2_{\text{adj}} = .144$, but only the statement *Are you satisfied with your working hours?* obtained a significance lower than .05. After the least significant items were gradually eliminated, the final model was created. The regression coefficients are shown in Table 8. The model is significant, $p\text{-value} < .001$, $R^2 = .197$, $R^2_{\text{adj}} = .172$.

Table 8: Parameter estimates for Final Model 3

| Model ^e | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| (Constant) | 5.321 | .465 | | 11.446 | .000 |
| Are you satisfied with your salary? | -.267 | .102 | -.248 | -2.625 | .010 |
| Are you satisfied with your working hours? | -.256 | .112 | -.212 | -2.286 | .024 |
| Are you satisfied with your supervisor behavior? | -.206 | .089 | -.220 | -2.324 | .022 |
| e. Dependent Variable: Have you thought of changing your job soon? | | | | | |

After comparing Final Model 3 with Final Model 2 for job satisfaction, it is apparent that the same two significant independent variables (financial remuneration and working hours) apply to turnover intentions and job satisfaction, but the other significant variables differ. The results are in line with the theory. Salary and working conditions were confirmed as significant for turnover by Cotton and Tuttle (1986) as well as Korff et al. (2015). Liu et al. (2013) revealed significant influence of superior behaviour on satisfaction. Also, Nový et al. (2006) include all three causes as significant causes for deciding to leave a job. Dissatisfaction with pay is also one of the main reasons for turnover according to the instrumentality theory and a significant reason according to Herzberg's theory, since salary is one of the main hygiene factors. In accordance with Herzberg's theory, working hours is another significant aspect. Supervisor behaviour is more of a motivator, which means that dissatisfaction with it should not result in dissatisfaction, but rather in a lack of satisfaction. Therefore, the result should be lower motivation for performance rather than turnover intention.

Some authors confirmed that age, tenure, sex and education are also significant predictors of turnover intentions. For this reason, subsequent research has focused on revealing their influence.

The respondent structure did not allow for including these variables in previous models, so I decided to verify their impact on turnover intentions separately. Since none of the items demonstrated normal distribution, I used the Kruskal Wallis test. The results are shown in Table 9, and it is apparent that none of the variables presented have a significant impact on turnover.

Table 9: Normality test results and Kruskal Wallis test

| Variable | Test normality | | Kruskal Wallis test | |
|-----------|--------------------|--------------|---------------------|-------------|
| | Kolmogorov-Smirnov | Shapiro-Wilk | Chi-Square | Asymp. Sig. |
| age | .000 | .000 | 8.452 | .086 |
| tenure | .000 | .000 | 6.320 | .097 |
| education | .000 | .000 | 2.745 | .433 |
| gender | .000 | .000 | .250 | .617 |

With respect to the existence of a pension that might influence the decision to leave, I decided to focus on further research on tenure, trying to describe its impact on the decision to leave. The conclusions can also be related to age, although the data structure does not allow the confirmation of the dependence between current age and tenure. Table 10 clearly shows that more than 50 % of the expected frequencies are smaller than 5. However, the test requires fewer than 20 % of such frequencies. Nevertheless, the calculated chi-square is 3.11E-13, which would – with the requested structure of expected frequencies – quite decidedly meet the requirement for refusal based on the zero hypothesis regarding the independence between age and tenure on a significance level of .001.

Table 10: Chi-square test for tenure and age relationship

Actual values

| tenure/age | until 25 years | 25–35 | 36–50 | > 50 | total |
|----------------|----------------|-------|-------|------|-------|
| until 3 years | 16 | 3 | 3 | 1 | 23 |
| until 6 years | 6 | 21 | 2 | 0 | 29 |
| until 15 years | 0 | 24 | 8 | 2 | 34 |
| above 15 years | 0 | 1 | 6 | 5 | 12 |
| total | 22 | 49 | 19 | 8 | 98 |

Expected values

| | until 25 years | 25–35 | 36–50 | > 50 |
|----------------|----------------|-------|-------|------|
| until 3 years | 5,11 | 11,38 | 4,41 | 1,86 |
| until 6 years | 6,44 | 14,35 | 5,57 | 2,34 |
| until 15 years | 7,56 | 16,83 | 6,53 | 2,75 |
| above 15 years | 2,67 | 5,94 | 2,30 | 0,97 |

The respondent structure did not allow the use of the chi-square test even for assessing the dependence between turnover intentions and tenure. Table 11 shows that 70 % of the expected frequencies are smaller than 5. Still, the calculated chi-square would not allow the rejection of the independence hypothesis even with the required structure, since it is .399.

Table 11: Chi-square test for turnover tendencies

Actual values

| tenure/age | definitely yes | yes | maybe | not | definitely not | total |
|----------------|----------------|-----|-------|-----|----------------|-------|
| until 3 years | 1 | 3 | 5 | 7 | 8 | 24 |
| until 6 years | 6 | 7 | 4 | 9 | 3 | 29 |
| until 15 years | 3 | 12 | 5 | 7 | 7 | 34 |
| above 15 years | 1 | 3 | 1 | 5 | 2 | 12 |
| total | 11 | 25 | 15 | 28 | 20 | 99 |

Expected values

| tenure/age | definitely yes | yes | maybe | not | definitely not |
|----------------|----------------|------|-------|------|----------------|
| until 3 years | 2,67 | 6,06 | 3,64 | 6,79 | 4,85 |
| until 6 years | 3,22 | 7,32 | 4,39 | 8,2 | 5,86 |
| until 15 years | 3,78 | 8,59 | 5,15 | 9,62 | 6,87 |
| above 15 years | 1,33 | 3,03 | 1,82 | 3,39 | 2,42 |

Thus, Table 12 can only be commented on descriptively. What may seem surprising at first sight is the fact that the employees with the shortest tenure demonstrate the fewest turnover intentions. This fact contradicts previous findings (Porter/Steers 1972; Griffith et al. 2000; and partly Tschop et al. 2016). However, the situation in prison is different from a common job. Before getting a job, applicants have to pass physical tests and they undergo mental training. Unsuitable applicants and applicants with unreal expectations are usually not given the job, or they leave very soon after starting it. The time between when the decision to leave is made and the actual termination of employment is probably very short. As this study deals with turnover intentions, it does not include such respondents. Quite the contrary, turnover intentions could increase together with tenure due to physically and mentally demanding work. Having said that, Table 12 indicates that for up to category 6 and up to 15 years of tenure, the number of respondents considering staying at the job is similar to the number of respondents who are not considering leaving. The intervals used for segmentation by tenure does not allow a pension to be taken into consideration as a factor for staying at work. Furthermore, the method of calculating the pension means that this factor does not cause a sudden change in turnover.

The average tenure in prison service is 17–18 years (Vězeňská služba 2018) and data for 2017 show a sharp drop in the number of COs after reaching 45 years of age. It cannot be unambiguously established whether this is due to the pension or the demanding nature of the work, but the situation has been similar over the past 3 years when the number of COs and civil employees have been monitored separately in yearbooks (see Table 12).

Table 12: Age structure in Prison Service

| | COs | employees |
|----------|------|-----------|
| until 25 | 582 | 67 |
| 26–30 | 968 | 195 |
| 31–35 | 1121 | 190 |
| 36–40 | 1434 | 330 |
| 41–45 | 1292 | 634 |
| 56–50 | 781 | 671 |
| 51–60 | 692 | 1539 |
| >60 | 48 | 507 |

Conclusion

The article was focused on aspects of job satisfaction in a Czech prison. On the basis of responses from 90 % of COs, it was found that the overall satisfaction in this prison is saturated with satisfaction with working hours, job content, interpersonal relationships and pay. Satisfaction with supervisor support and satisfaction with organizational management were not assessed as significant predictors of job satisfaction. This finding is contrary to the literature (Castle 2008; Hartley et al. 2013; Kinman et al. 2016).

From the perspective of supervisor satisfaction, three predictors were significant: satisfaction with the communication of information, appraisal of work and the supervisor's organizational skills. Bourbonnais et al. (2007) and Hartley et al. (2013) have confirmed poor feedback and lack of information in the prison environment.

The relationship between turnover intentions and job satisfaction in COs was confirmed in the prison where the research was conducted. These conclusions are in line with previous research.

The confirmation of the basic factors that saturate turnover tendencies, i. e. dissatisfaction with salary and work (Cotton/Tuttle 1986; Korff et al. 2015) and with supervisor behaviour (Liu et al. 2013) is in accordance with the literature. The impact of age, tenure, sex and education could not be evidenced. Nevertheless, it is apparent that COs with very short tenures have the fewest turnover in-

tentions. That contradicts previous findings (Porter/Steers 1972; Tschop et al. 2016) based on meta-analyses. The discrepancy may be due to the fact that the quoted authors based their research on common environments; the situation in prison service is specific. In order to get the job, applicants need to pass physical tests and undergo a psychological examination. Thus, the expectations of new COs are much more realistic and they are not disillusioned. Future research should focus on verifying if the thorough physical and psychological testing done during the selection processes decreases turnover in new employees. The realistic expectations regarding the job and its demands probably support staying at work. Employers should, therefore, inform potential employees as accurately as possible.

The situation in Czech prisons is probably similar to prisons in other developed countries, even though the prisons there are overcrowded and COs face various problems. This is suggested by the fact that working hours, job content and pay were determined as significant predictors of job satisfaction. These are hygiene factors from Herzberg's theory which, after saturation, should not have any influence on satisfaction. On the contrary, supervisor support, which is a motivator according to Herzberg, did not have a significant influence on job satisfaction. Improvement of basic work conditions in prisons would probably result in a reduction in CO turnover, as even here a relationship between turnover intentions and job satisfaction was confirmed.

The study has shown that unlike in common environments, the average tenure in the prison is much longer, about 18 years, which may be partly due to a better selection procedure (only one applicant out of seven succeeds) and partly due to the pension that employees qualify for after a tenure of 15 years, with the maximum amount received after 30 years of tenure.

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