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# Selected aspects of staff functioning in the Polish and Portuguese penitentiary system

# Wybrane aspekty funkcjonowania kadry w polskim i portugalskim systemie penitencjarnym

Engaging in professional activity and recognizing factors that cause work burnout in the face of work demands and resources are important for the professional functioning and health of prison officers. The purpose of this study is to expand knowledge of selected work determinants in the Polish and Portuguese penitentiary systems. The results showed that officers in both countries adequately use job resources to cope with job demands, thus preventing job burnout and sustaining their own work engagement.

Key words: job demans and resources, work engagement, burnout, prison officers

Zaangażowanie w aktywność zawodową oraz rozpoznawanie czynników powodujących wypalenie zawodowe w obliczu wymagań i zasobów pracy mają istotne znaczenie dla funkcjonowania i zdrowia funkcjonariuszy więziennictwa. Celem pracy jest poszerzenie wiedzy na temat wybranych uwarunkowań pracy w polskim i portugalskim systemie penitencjarnym. Wyniki pokazały, że funkcjonariusze obu krajów adekwatnie wykorzystują zasoby pracy dla radzenia sobie z jej wymaganiami, przeciwdziałając w ten sposób wypaleniu zawodowemu i podtrzymując własne zaangażowanie w wykonywanie pracy.

**Słowa kluczowe:** wymagania i zasoby pracy, zaangażowanie w prace, wypalenie, więziennictwo

# Introduction

Penitentiary work is related to difficult working conditions<sup>1</sup> required special availability of service subordination, daily confrontation with difficult situations, threats to personal safety. The profession of a Prison Service officer is considered difficult and dangerous in many countries. It is characterised by specific requirements with regard to psychophysical fitness, agreement to carry out official tasks at the risk of life and health, and a high level of psychological strain<sup>2</sup>. The latter consists of, among other things, a significant level of responsibility, continuous availability, shift work, overload of duties, performing tasks under time pressure and under the threat of criminal liability for negligence and errors<sup>3</sup>. The official subordination and specific management style of the formation, affecting interpersonal relations, are at the same time factors affecting the professional well-being of prison staff. To this list should be added the daily exposure of prison staff to extraordinary events such as suicide attempts or suicides by persons deprived of their liberty, self-injury, mutinies, hunger strikes, undesirable manifestations of prisoners' behaviour due to their membership of informal criminal subculture structures, escape attempts, collective speeches and mutinies, threats of physical assault. The main task of the Prison Service is to protect society and prevent crime by adequately analysing and correcting the behaviour of offenders and monitoring their rehabilitation process. In this situation, it seems extremely important to have an in-depth knowledge of the country's penitentiary system, the way in which officers carry out their work, which helps to reflect on the mechanisms of work that are working correctly and to identify the mechanisms that threaten its proper course. Paying attention to the use of work resources by prison officers in order to reduce the demands of work and thus reduce stress<sup>4</sup>, the risk of burnout and build work engagement at work.

<sup>&</sup>lt;sup>1</sup> G.Kinman, A.J.Clements, J.Hart, *Work-related wellbeing in UK prison officers: A benchmarking approach.* "International Journal of Workplace Health Management", 2016, no 9(3), pp.290–307.

<sup>&</sup>lt;sup>2</sup> E.Sygit-Kowalkowska, A.Piotrowski, I.Hamzah, *Insomnia among Prison Officers and Its Relationship with Occupational Burnout: The Role of Coping with Stress in Polish and Indonesian Samples*, "Research and Public Health", 2021, no 18, pp. 1-24.

<sup>&</sup>lt;sup>3</sup> A. Piotrowski, *Stres zawodowy a konflikty pomiędzy pracą a rodziną personelu medycznego służby więziennej,* "Przegląd Naukowo-Metodyczny. Edukacja dla Bezpieczeństwa", 2014, no 2, pp.295-306.

<sup>&</sup>lt;sup>4</sup> C.Finney, E.Stergiopoulos, J.Hensel, et al., Organizational stressors associated with job stress and burnout in correctional officers: a systematic review, "BMC Public Health", 2013, no 13, p. 82.

# Penitentiary System in Poland

The criminal Executive Penal Code (ustawa z dnia 6 czerwca 1997 r. Kodeks Karny Wykonawczy<sup>5</sup>) is basic document that organizes functioning of Polish penitentiary system with respect to inmates rights and duties. The act of 9th of April 2010 on Prison Service (ustawa z dnia 9 kwietnia 2010 r. o Służbie Więziennej z późniejszymi zmianami)<sup>6</sup> is basic act that regulates duties and structure of prison officers. A more detailed reference to the Executive Penal Code is contained in the Ordinances of the Minister of Justice on the Organizational Regulations for the Execution of Prison Sentences and in the Ordinance on the Organizational Regulations for Temporary Detention. On the other hand, regulations of 156 Penitentiary Units (prisons and remand centers) (internal order) even more precisely referring to the conditions of serving a sentence are issued by directors of penitentiary units. Minister of Justice is governer of Polish penitentiary system. Polish Prison Service is an uniformed and armed formation governed by General Inspector is Director of Prison Service (Dyrektor Generalny Służby Więziennej), who is nominated by Prime Minister on application by Minister of Justice and is responsible for providing the international human rights standards within correctional practices. General Inspector Director of Prison Service (DGSW) conducts a Central Board of Prison Service in Warsaw, who is responsible for for the work of prison staff and the way penitentiary interventions are carried out. There are also 15 functioning 15 Circuit Inspectors of Prisons Service, who are very often they are lokated in polish provincial cities. Proper Directors of Inspectorates are responsible for Penitentiary Units on their jurisdiction, run by directors nominated and dissmised by DGSW. Prison directors are responsible for security, coordination and supervise security, order and penitentiary interactions of unit's cadre (educators, teachers, psychologists, therapists), correct and lawful execution of detension and prison sentence, functioning of prison medical centers, schools, inmate's work, research and diagnostic units, financial resources, hiring prison taff. There are penitentiary units types: for young offenders (up to 21 years), for people serving sentence, for the first time, for penitentiary recidivists; organized as: closed-type

<sup>&</sup>lt;sup>5</sup> Ustawa z dnia 6 czerwca 1997 r. Kodeks Karny Wykonawczy.

<sup>&</sup>lt;sup>6</sup> Ustawa z dnia 9 kwietnia 2010r. o Służbie Więziennej.

units, semi open- type units and open-type units. There are also separate units for detainees (areszty śledcze). The prisoners and penitentiary cadre follow the executive penal code. Prison Service Officers and civilian employees are working in the polish prisons, but there are possitions positions possible for prison officers only, who can specialize and develop qualifications in centers of development, possible mostly through study in Academy of Justice in Warsaw.

## Penitentiary System in Portugal

The Portuguese prison system aims at public safety, legal adherence, and offender rehabilitation. It is aligned with EU standards and international agreements, following contemporary and humane correctional practices. The oversight and management of the prison system in Portugal fall under the purview of the Ministry of Justice and the General Directorate of Reintegration and Prison Services (DGRSP). The DGRSP plays a pivotal role in aligning the system with its objectives and upholding international human rights standards within correctional practices. The guiding principles of the DGRSP are as follows: belief in the capacity for human change; the defense and promotion of human rights; the defense of societal security; the promotion of social reintegration; and the prevention of criminal recidivism (DGRSP, 2023). There are 3 types of general security levels: medium (5), high (43), and special (Monsanto Prison being the only special regime penitentiary); and two types of levels of management complexity: medium (27) and high (22). As of December the 31st, 2022, the Portuguese prison system housed approximately 12383 inmates (including 396 not criminally responsible) across 49 facilities (RASI 2022) The prison population includes both pre-trial detainees (2469) and individuals serving sentences (9914). At the above date, the occupancy rate was 96.3%, indicating that the system was operating close to its capacity. The dimension of the prison facilities varies substantially: from 38 to 887 prisoners, with 17 correctional facilities having a capacity of fewer than 100 individuals, and 11 of them exceeding 500 people (ReShape, 2023). During imprisonment and based on the ongoing assessment of the individual, the custodial measures can be carried out in three distinct regimes: common regime, open regime, and security regime (Código de Execução de Penas). The common regime occurs in

high-security prison facilities and is characterized by activities in common living spaces inside the prison. The open regime takes place in medium-security prison facilities or units, favoring community integration and external contacts. It may include: a) open regime indoors: activities within the perimeter of the prison with surveillance – only inmates sentenced to imprisonment for a duration equal to or less than 1 year or imprisonment for more than 1 year, provided they have served 1/6 of the sentence; b) open regime outdoors: educational, training, or professional activities in open environments without surveillance - depends on serving 1/4 of the sentence, previous successful completion of 1 judicial leave, and no ongoing legal process involving pre-trial detention. The security regime takes place in special security prison facilities, limiting communal living. It must be reassessed within a maximum period of 6 months or 3 months for inmates aged up to 21 years. The Portuguese prison system aggregates professionals from different areas who together contributed to the inmate's rehabilitation and social reintegration, such as informatics, clinical psychology, medicine, nursing, pharmaceutics, and diagnostic, medical assistance, operational assistance, technician assistance, reeducation services, security (i.e., prison guards, which is about 4700 people) and other professionals (e.g., religious assistant, kindergarten teacher, different superior technicians) (DGRSP, 2023).

## Job demands and job resources

## Job Demands

A.B.Bakker i E.Demerouti attribute employee well-being to the presence of work environment resources<sup>7</sup>. Job demands-resources theory heuristically and simplistically identifies how job burnout and work engagement can be triggered by the interaction of two specific aspects of work that can be found in any organisational context: job demands and job resources <sup>8</sup>. Job demands refer to the physical, psychological,

<sup>&</sup>lt;sup>7</sup> D. Xanthopoulou, A.B. Bakker, E.Demerouti, W.B. Schaufeli, *The role of personal resources in the job demands-resources model.* "International Journal of Stress Management", 2007, no 14(2), pp.121–141.

<sup>&</sup>lt;sup>8</sup> E. Demerouti, A.B. Bakker *The Job-Resources model: Challenges for future research.* "Journal of Industrial Psychology" 2011, no 37, pp. 974–983.

social, organisational aspects of the job requiring sustained physical or psychological effort and therefore involve physiological or psychological costs <sup>9</sup>. Examples of this are the high pressure of the work environment, the pace of work, the multitude of work duties or emotionally demanding work relationships. Not all demands can be described as negative, but they can become into occupational stressors, if their fulfilment generates a lot of effort for the employee, and there is no possibility to recover and recuperate <sup>10</sup>. Stressed employees struggle to protect their primary goals (benefits) with increased work demands that require increased mental effort (costs). The impact of work demands on the employee's health through the so-called energy process, triggered by excessive workloads and through the exhaustion of mental and physical resources, can lead to psychosomatic disorders <sup>11</sup>. Increased job demands result in worker mobilisation and increased work effort, which generates psycho-physical costs. Being with offenders on a daily basis, means working with demoralised, aggressive, disturbed people with a negative attitude towards others, which causes severe psychological stress in officers and increases the risk of disease <sup>12</sup>. The employee's stress, trauma or fear experienced, the conflict of conscience are present in the work of prison staff. Getting to know such serious problems of prisoners involves the emotional involvement of officers. The Prison Service is a profession belonging to the group of so-called 'high-risk' professions, in which the employee, by maintaining intensive contact with people, is exposed to the phenomenon of work burnout<sup>13</sup>. Prison job requirement is often the relinquishment of much of one's family and personal life, the need to fit into the rigid rules of the profession. When treating the fulfilment of a social role as a requirement in the uniformed services, it is necessary to look at the employee and his/her professional functioning with a small margin of freedom. Officers need to cope with the demands of the job and be familiar with

<sup>&</sup>lt;sup>9</sup> E.Demerouti, A.B. Bakker, F. Nachreiner, W.B. Schaufeli, *The job demands-resources model of burnout*. "Journal of Applied Psychology", 2001, no 86(3), pp.499–512.

<sup>&</sup>lt;sup>10</sup> T.F. Meijman, G. Mulder, *Psychological aspects of workload*. W: P. J. D. Drenth, H. Thierry, C.J. de Wolff (eds.), Handbook of work and organizational: Work psychology (pp. 5–33), 1998, Psychology Press Taylor and Francis.

 <sup>&</sup>lt;sup>11</sup> W.B.Schaufeli, A.B.Bakker, W.Van Rhenen, *How changes in job demands and resources predict burnout, work engagement and sickness absenteeism.* "Journal of Organizational Behavior", 2009, no 30(7), pp.893–917.
<sup>12</sup> E.Sygit-Kowalkowska et al., ... p. 4.

<sup>&</sup>lt;sup>13</sup> A.Piotrowski, R. Poklek, *Niedopasowanie organizacyjne a wypalenie zawodowe wśród personelu penitencjarnego*, [w:] J. Maciejewski, M. Stochmal (eds.), *Metodologiczne problemy w badaniach grup dyspozycyjnych*, Warszawa 2014, pp. 354-375.

the dilemmas of the professional role such as stress, increased work pace, role conflict, duty overload, staff shortages, feeling they have no say in the selection of colleagues or staff turnover.

#### Job resources

In contrast to job requirements, resources are the second group of job/organisational characteristics. They refer to the physical, psychological, social and/or organisational aspects of the job that can provide a vehicle for achieving job goals, contributing to the reduction of psycho-physiological costs associated with job demands. The most common resources include: being able to control the work, participating in decision-making, receiving feedback on job performance, variety of tasks performed, opportunities for development, support from supervisor, colleagues<sup>14</sup>. Job resources provide a sense of meaning and significance of work and satisfy basic human needs, motivate and positively influence work engagement e.g. a state of fulfilment, vigour, dedication and absorption<sup>15</sup>. This happens through the motivational role of work resources, a mechanism involving recovery. According to it, resource-rich work environments foster the willingness of employees to dedicate their efforts and abilities to a successful task and the achievement of a goal, which is further supported by cooperation with others and feedback. The motivational process fosters employee engagement through the satisfaction of basic needs, e.g. autonomy or competence to achieve career goals. The theory assumes that resources have the task of moderating the impact of job demands and, while they have clear main effects, they also work together. Job resources are referred to as instrumental by some researchers because they help coping with job demands by relieving negative tension <sup>16</sup>. Personal resources (personality traits, sense of efficacy, self-esteem, optimism)<sup>17</sup> and job resources (autonomy, availability of feedback, social support, development opportunities) help to achieve

<sup>&</sup>lt;sup>14</sup> E.Demerouti, A.B. Bakker, *The Job-Resources model: Challenges for future research.* "Journal of Industrial Psychology". 2011, no 37, pp.974–983.

<sup>&</sup>lt;sup>15</sup> W.B.Schaufeli, A.B.Bakker, *Job demands, job resources, and their relationship with burnout and engagement:* A multi-sample study. "Journal of Organizational Behavior", 2004, no 25(3), pp.293–315.

<sup>&</sup>lt;sup>16</sup> A.B.Bakker, E.Demerouti, T.W.Taris, W.B. Schaufeli, P.J.G. Schreurs, *A multigroup analysis of the job demands-resources model in four home care organizations*. "International Journal of Stress Management", 2003, no 10(1), pp.16–38.

<sup>&</sup>lt;sup>17</sup> D.Xanthopoulou et al., ...p. 128.

goals, cope with the demands of the job and stimulate development and learning. It was noted that prison staff attempt to cope with the job demands of the job by using personal resources to enhance their own effectiveness and engagement <sup>18</sup>. The Job Demands-Resources Theory outlines the processes through which work requirements and resources affect workers well-being and work performance. Most of the research based on this theory has looked at the processes at the individual level of the employee, which influences working conditions. An employee may be reactive and undermine himself/herself by creating greater job demands, or he/she may be proactive and optimise job demands and resources from below. It seems an important question to ask how employees' proactivity influences relationships in the organisation and what allows them to build well-being by creating work engagement.

#### Work burnout

In defining work burnout, it is useful to start with the concept of stress, an interactive comprehensive definition of which dominates the psychological literature. Stress is defined as the interaction or mismatch between environmental (work) opportunities and demands and the individual needs, abilities and expectations of employees. When there are environmental demands that exceed a person's capabilities, when expectations are not met and capabilities are over-exploited – the human organism reacts with cognitive, emotional, behavioural and/or physiological pathogenic mechanisms, of varying intensity, appearance or not, and of varying duration of exposure – which generates disease states. these can lead to precursors of illness. There is then a crisis in the professional activity of the employee understood as a derivative of organisational stress, which is the source of burnout. Disturbed employee-organisational relations (lack of controllability, workload, lack of participation in decision-making insufficient financial gratification, breakdown of the organisational community, unfair treatment of staff and the conflict of values <sup>19</sup> generate occupational stress and burnout, each with different

<sup>&</sup>lt;sup>18</sup> J.Nowicka-Kostrzewska, B. Rożnowski, *Personality in prison uniform. The influence of personality on building work engagement, applying job crafting strategies and well-being among prison officers.* "Current Issues in Personality Psychology", 2023, no 11(4), pp.283-296

<sup>&</sup>lt;sup>19</sup> C. Maslach, M. Leiter, *Early predictors of job burnout and engagement*, "Journal of Applied Psychology", 2008, no 93(3), pp.498–512.

mechanisms of action and causes. The job demands-resources model of job burnout indicates that exhaustion is triggered by: workload, time pressure, physical environment, contact with the recipient, shift work. Work disengagement is stimulated by: feedback, rewards, job control, participation, safety, supervisor support<sup>20</sup>. According to Schaufeli's definition, a prolonged stress reaction, particularly noticeable among professionals e.g. teachers, nurses, social workers or prison staff<sup>21</sup>. Work burnout is a psychological syndrome of gradually developing emotional exhaustion, depersonalisation and a reduced sense of personal achievements. Emotional exhaustion refers to the depletion of emotional resources. Depersonalisation refers to a negative reaction towards other people at work (subordinates, colleagues, prisoners). Reduced personal achievement is associated with a decreased sense of competence and a lack of feeling successful in life<sup>22</sup>. The first stage of work burnout is an imbalance between demands (stress) and the employee's resources. Emotional demands can lead to the depletion of emotional resources and further to negative attitudes and behaviours (mechanical way of treating others, cynical preoccupation with satisfying one's own needs). These negative attitudes and behaviours form a depersonalisation component, which is a defence mechanism for coping with difficulties and aimed at creating psychological distance designed to defend the employee from the effects of stress in the work environment. Despite the assumption that this is a coping strategy, relationship problems become apparent, which interferes with the achievement of professional goals, or a decreased sense of personal achievement and an increased sense of incompetence and self-doubt, which is recognised as a component of the burnout syndrome. Behavioural responses to stress (i.e. turnover and absenteeism) documented by archival data suggest that prison officers work under stressful working conditions.

<sup>&</sup>lt;sup>20</sup> B.Rożnowski, P.Fortuna, *Psychologia biznesu*, Warszawa 2020, p. 321.

<sup>&</sup>lt;sup>21</sup> W.B. Schaufeli, C. Maslach, T. Marek, *Professional burnout: Recent developments in theory and research.* Washington 1993, pp. 19-32.

<sup>&</sup>lt;sup>22</sup> W.B.Schaufell, D.Enzmann, D. *The burnout companion to study and practice: A critical analysis.* 1998, Taylor and Francis.

### Work engagement

Work engagement is understood as a positive work-related state of mind, consisting of three factors: vigour at work, dedication and absorption<sup>23</sup>. Vigor is the resilience to factors that interfere with work and a high level of energy when working. Devotion to work refers to a belief in the importance and value of work and feeling positive emotions while doing it. Apsorption with work refers to full concentration and focus on the work at hand, which may involve feeling that time is passing quickly. Positively related to engagement are the resources at work: skills, learning opportunities, support from colleagues and supervisors, performance feedback<sup>24</sup>. Engaged employees are characterised by energy and enthusiasm, which help to sustain the positive affect needed to initiate and continue to pursue their work tasks. They are those who are open to new experiences, creative and actively explore their own environment and identify more with the strategic goals of the organisation, leading them to behave in innovative ways, the positive consequence of which has been increased job satisfaction and work engagement<sup>25</sup>employees' satisfactory personal lives, work-family relationships and happiness. Work engagement can be considered one of the most important constructs of positive wellbeing at work and happiness<sup>26</sup>. This is positively correlated with intrinsic motivation<sup>27</sup>. Engaged employees using personal resources as autonomy, optimism, self-esteem and self-efficacy<sup>28</sup> are more oriented towards work values rewards or role-related tasks<sup>29</sup>. Job resources are crucial for the development of employee's engagement, whereas burnout arises from high levels of demands that are not accompanied by the mitigating effect

<sup>&</sup>lt;sup>23</sup> W.B. Schaufeli, M. Salanova, V. González-Romá, A.B. Bakker, *The measurement of engagement and burnout: A two sample confirmatory factor analytic approach.* Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being, 2002, nr 3(1), pp.71–92.

<sup>&</sup>lt;sup>24</sup> Ibidem.

<sup>&</sup>lt;sup>25</sup> A.B.Bakker, E.Demerouti, A.Sanz-Vergel, *Job demands-resources theory: Ten years later.* "Annual Review of Organizational Psychology and Organizational Behavior", 2023, no 10, pp.25–53.

<sup>&</sup>lt;sup>26</sup> A.B.Bakker, W.G.M.Oerlemans, *Subjective well-being*. W: K.S.Cameron, G.M.Spreitzer (ed.), The Oxford handbook of positive organizational scholarship (pp.178–187), 2012, Oxford University Press.

<sup>&</sup>lt;sup>27</sup> W.B.Schaufeli, M.Salanova, V.González-Romá, A.B.Bakker, *The measurement of engagement and burnout:* A two sample confirmatory factor analytic approach, "Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being", 2002, no 3(1), pp.71–92.

<sup>&</sup>lt;sup>28</sup> A.B.Bakker, W.B.Schaufeli, M.Leiter, T. Taris, *Work engagement: An emerging concept in occupational health psychology.* "Work and Stress", 2008, no 22(3), pp.187–200.

<sup>&</sup>lt;sup>29</sup> Ibidem.

of resources. Research shows<sup>30</sup> that increases in work demands (duty overload, emotional demands, work-life overlap) and decreases in work resources (social support, autonomy, learning opportunities, feedback) are predictors of burnout. An increase in work resources, predicts an increase in work engagement.

# Method

The research question was therefore formulated: To what extent will the variables 'country' and 'department of service' differentiate the level of job resources and demands, and thus predict the causes of job burnout and act on officers' work engagement. We thus assumed the existence of differences in the Polish and Portuguese penitentiary systems in the experience of work demands and resources. We stopped at the research question in our study because we did not find a theoretical basis for the formulation of research hypotheses and because our study is exploratory in nature.

# Operationalisation of variables

The validation of prison officer's well-being research model required appropriate research methods that measure variables at both trait (personality) and state (other variables) levels. Copenhagen Psychosocial Questionnaire (COPSOQ II) by Kristensen et al. (2005)<sup>31</sup> is a tool for assessing psychosocial working conditions and prevention of occupational stress. Most of scales and subscales are categorized into 7 work-related areas (dimensions) and have a 5-points range There are skales: work demands (subscales: quantitative demands, cognitive demands, emotional demands, pace of work, demands to hide emotions), work organization and content (subscales: sense of influence at work, opportunities for development, variety of work, meaning of work, attachment to workplace), social relations and leadership (subscales: recognition at work, sense of

 <sup>&</sup>lt;sup>30</sup> W.B.Schaufeli, A.B.Bakker, W.Van Rhenen, *How changes in job demands and resources predict burnout, work engagement and sickness absenteeism.* "Journal of Organizational Behavior", 2009, no 30(7), pp. 893–917.
<sup>31</sup> Ł. Baka, M. Prusik, J.H. Pejtersen, K. Grala, *Full evaluation of the psychometric properties of COPSOQ*

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predictability, role clarity, role conflict, support from co-workers, support from supervisor, leadership quality and social climate among employees), human-life interaction (subscales: Work-life conflict, personal-life conflict, job insecurity, job satisfaction), work values (subscales: trust in employees, trust in management, fairness and respect, social equality), health and well-being (subscales: general health, sleep problems, depression, job burnout, tension, stress, self-efficacy beliefs, exposure to abusive behavior).

The Utrecht Work Engagement Scale (UWES-9) by W.Shaufeli and A.Bakker, in a Polish adaptation by Szabowska-Walaszczyk et al., measures work engagement. Usually the survey yields an overall score, which is an indicator of the level of work engagement, and scores on individual three scales: vigor, apsorption and dedication. The UWES-9 questionnaire consists of 9 statements, rated on a 7-point scale in relation to the three aforementioned scales, which have high reliability and theoretical relevance. The  $\alpha$ -Cronbach's reliability index for the entire questionnaire and for the subscales was reasonable.

The Burnout Assessment Tool (BAT-23) by W.Schaufeli in the Polish adaptation by B.Basińska and E.Gruszczynska (2021) in cooperation with the Dutch co-author of the inventory, diagnoses primary (BAT-C) and secondary (BAT-S) symptoms of work burnout. This study uses a version of the BAT-C, which consists of 23 statements describing 4 dimensities: exhaustion, deterioration of cognitive and emotional functioning (inability to do work), and mental distancing (aversion to work). Inventory contains 5-point scale expressing the frequency of condition during work. The Cronbach's alpha and composite reliability indicated BAT-PL as a reliable measurement tool. has good psychometric characteristics<sup>32</sup>

The Job-related Affective Well-being Scale by P. Warr (1990) in the Polish adaptation by E. Mielniczuk and M. Laguna (2018) is a tool to examine the linear and curvilinear longitudinal associations between work characteristics and job-related affective well-being. The Warr's scale included four interrelated factors of job-related anxiety, comfort, depression, and enthusiasm. The method consists of 12 adjectives describing the emotional states experienced by employees in a work situation. A distinction was made between positive and negative emotions, which were

<sup>&</sup>lt;sup>32</sup> B.Basinska, E.Gruszczyńska, W.B.Schaufeli, *The Polish adaptation of the Burnout Assessment Tool (BAT-PL) by W. Schaufeli et al.*, "Psychiatria Polska", 2021, no 57, pp.1-13.

assigned to one of four dimensions, respectively: anxiety ("tense", "anxious", "worried"), comfort ("calm", "satisfied", "relaxed"), depression ("depressed", "gloomy", "unhappy"), enthusiasm ("happy", "enthusiastic", "optimistic"). A six-point scale is used to determine the frequency with which work causes one to feel the emotions in recent weeks or on a given day ("Never," "Once in a while," "Sometimes," "Often," "Very often," "Always"). Also, the tool's relevance and constancy indicators are calculated at an acceptable level.

## Respondents and procedure

The prison officers (total N=420) of the Polish and Portuguese Prison Service participated in the study. The selection was stratified so that all categories of employment (superiors and subordinates; women and men; different levels of education) were represented in the sample in sufficiently large numbers in accordance with the proportion of prison employment. Participation in the study was voluntary, with participants completing a set of tests (COPSOQ II, UWES-9, BAT-23, Job-related Affect Well-being Scale, and a sociometric tool) free of charge during work or training. The return rate of the questionnaires was 96%.

## Results

The study is a comparisons of work situation evaluations and reactions of officers from Portugal and Poland focuses on 4 variables that are key from the perspective of JD-R theory: job demands and resources, job burnout and work engagement. The first two variables relate to employees' assessments of the work situation, and the next two relate to descriptions of employees' reactions. Comparisons were made using an analysis of variance that takes into account the variability of the results derived from the variable of the country in which the survey was conducted and the department of employment indicated by the respondents.

### Perception of job demands and job resources

#### Job demands

Among job requirements, the following score highest in both countries: cognitive requirements ( $M_{PL} = 3.11$ ;  $SD_{PL} = 0.63$ ;  $M_{PT} =$ 2.73; SD<sub>PT</sub> = 0.61), emotional requirements (M<sub>PL</sub> = 2.73; SD<sub>PL</sub> = 0.77;  $M_{PT} = 2.79$ ;  $SD_{PT} = 0.88$ ) and work pace ( $M_{PI} = 2.85$ ; SDPL = 0.80;  $M_{PT} = 2.58$ ;  $SD_{PT} = 0.86$ ) (Table 10). There are differences in scores between the two countries (Poland and Portugal) studied for estimates of Cognitive Requirements (F=17.40; p=0.001) and Work Pace (F=5.64; p=0.02) (Table 2). Job insecurity scored lowest in this study, indicating that officers from both countries do not experience job insecurity. The results of the analysis of variance indicate that ratings of all dimensions of work demands are significantly different across prison service departments (Table 1). In the case of quantitative requirements, employees working in Other department in Portugal rated these requirements significantly lower (M=1.94; SD=0.79) than their counterparts from other departments (p=0.001) and also than Polish employees of Other department (p=0.002). The level of intensity of cognitive demands was rated higher by the Polish officers (F=17.40; df=1; p<0.001). This difference is most clearly seen among officers of the Security Department (MPL = 3.12; SDPL= 0.61; MPT = 2.67; SDPT= 0.59; p<0.001). A single difference in Polish employee group was revealed, indicating a lower cognitive load experienced by employees in the Other department than in the *Penitentiary* (p=0.021) (Table 3). With respect to emotional demands, the differences revealed are mainly in the employment departments (F=11.99; df=1; p<0.001) (Table 2) The higher score obtained by Portugal employees of the Penitentiary department which differs significantly from both other groups (p < 0.001; p = 0.042. The single difference in the Polish sample between the Penitentiary and Other departments (p=0.039) were noticed. Ratings of quantitative and emotional requirements, as well as the level of role conflict and job insecurity in the two countries are not statistically different. The results of the analysis of variance of the work pace variable (Table 1) indicate that the significance of the differences between countries and service departments is due to the high score obtained by the Penitentiary department in Portugal

 $(M_{pT} = 3.10; SD_{pT} = 0.65)$ . This result differs from both other groups in the country (p < 0.001; p = 0.045 (Table 3). Employees in the Other department are subject to less work pace pressure. There was also a significant difference between the ratings of this dimension by employees in the *Other* department from Portugal and Poland (p=0.008), where Polish officers believe that they have to work faster. Although the results for job insecurity are low (Table 3) it can be pointed out that the group of Portuguese employees in the Other department feel the pressures of this requirement stronger ( $M_{PT} = 1.56$ ;  $SD_{PT} = 1.57$ ). At the same time, it is worth noting that the high standard deviation score in this case indicates low homogeneity in the ratings given. The role conflict, although it shows some variation between departments (Table 2), when carefully analyzing the differences using post-hoc tests, only one difference is close to the level of significance. This refers to the group of officers from Portugal and more specifically to the comparison of the *Penitentiary* department, which has higher scores (Table 1).

**Picture 1.** Job demands and job resources – comparison Poland and Portugal (general level)



Table	table 1. Morages and variances of joo demaines facings in study groups.	Co a		nt in ent			ne m egi	uuy gror	.edi					
			Quantitative 1	Juantitative requirements	Cognitive re	Cognitive requirements	Emotional requirements	equirements	Work pace	pace	Job insecurity	ecurity	Role Conflict	onflict
Country DEPT	DEPT	u	М	SD	М	SD	М	SD	М	SD	М	SD	М	SD
PL	Other	27	2,204	0,609	2,796	0,8	2,455	0,82	2,982	0,728	0,644	0,638	2,046	0,447
	Security	142	1,949	0,791	3,124	0,614	2,696	0,776	2,785	0,837	0,906	0,815	2,243	0,744
	Penitentiary	41	2,14	1,008	3,274	0,46	3,045	0,606	2,975	0,697	0,726	0,678	2,179	0,694
	Total	210	2,019	0,82	3,111	0,626	2,733	0,768	2,847	0,8	0,837	0,773	2,205	0,703
ΡT	Other	85	1,494	0,963	2,742	0,647	2,61	0,962	2,361	0,837	1,567	1,562	2,066	0,699
	Security	95	2,235	0,721	2,666	0,585	2,794	0,833	2,602	0,872	0,58	0,704	2,223	0,59
	Penitentiary	30	2,533	0,714	2,889	0,563	3,288	0,607	3,098	0,647	0,656	0,781	2,467	0,698
	Total	210	1,978	0,92	2,728	0,61	2,79	0,885	2,575	0,861	0,99	1,231	2,194	0,662

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	I. Averages and variances of job demands ratings in study group
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Table 2. F-statistic values for comparisons of the intensity o fjob demands perceived by prison .officers from the countries and departments surveyed.

		T		•									
		Quantitative	Quantitative requirements Cognitive requirements	Cognitive req	uirements	Emotional requirements Work pace	quirements	Work pace		Job insecurity		Role Conflict	ict
term	df	F	p.	F	p.	F	p.	F	p.	F	p.	F	p.
Overall model	1	11.186	0.000	10.888	0.000	5.154	0.000	6.528	0.000	11.044	0.000	2.017	0.075
Country	1	0.011	0.915	17.401	0.000	3.028	0.083	5.636	0.018	2.363	0.125	1.458	0.228
Dept.	2	6.635	0.001	4.946	0.008	11.994	0.000	5.211	0.006	4.834	0.008	3.213	0.041
Country* Dept.	2	12.474	0.000	3.309	0.038	0.220	0.803	4.081	0.018	12.465	0.000	1.376	0.254
Residual	414												
Adj R2		0.108		0.106		0.047		0.062		0.107		0.012	

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contrast	Quantitative requirements Cognitive requirements	Cognitive requirements	Emotional requirements	Work pace	Job Insecurity	Role Conflict
PL Other – PT Other	0.002	0.999	0.954	0.008	0.001	1.000
PL Security – PT Security	0.095	0.001	0.943	0.539	0.118	1.000
PL Penitencjarny – PT Penitenciary	0.350	0.094	0.812	0.989	1.000	0.490
PL Other - PL Security	0.682	0.111	0.716	0.858	0.794	0.738
PL Other - PL Penitenciary	1.000	0.021	0.039	1.000	0.999	0.968
PL Security – PL Penitenciary	0.780	0.734	0.145	0.775	0.904	0.995
PT Other - PT Security	0.001	0.961	0.649	0.352	0.001	0.627
PT Other - PT Penitenciary	0.001	0.867	0.001	0.001	0.001	0.062
PT Security - PT Penitenciary	0.511	0.504	0.042	0.045	0.999	0.524

**Table 3.** P-values of significance of differences in mean ratings of job demands for groups of respondents.





#### Job resources

In the groups of prison officers the following resources received the highest ratings: role clarity ( $M_{PI} = 2.85$ ;  $SD_{PI} = 0.67$ ;  $M_{PT} = 2.89$ ;  $SD_{PT} = 0.73$ ), social climate ( $M_{PI} = 2.72$ ;  $SD_{PI} = 0.63$ ;  $M_{PT} = 2.64$ ;  $SD_{PT}^{PT} = 0.91$ ) possibilities of development ( $M_{PL} = 2.44$ ;  $SD_{PL} = 0.72$ ;  $M_{PT} = 2.47$ ;  $SD_{PT} = 0.79$ ), rewards ( $M_{PL} = 2.11$ ;  $SD_{PL} = 0.83$ ;  $M_{PT} = 2.42$ ;  $SD_{pT} = 0.96$ ) and social suport from colleagues (M<sub>PL</sub> = 2.01; SD<sub>PL</sub> = 0.83;  $M_{pT} = 2.30$ ; SD<sub>pT</sub> = 0.82). Average scores indicate that these resources are available to prison employees. The lowest scores occurred regarding resources: sense of influence ( $M_{PL} = 1.76$ ;  $SD_{PL} = 0.81$ ;  $M_{PT} = 1.33$ ;  $SD_{PT} = 0.80$ ) and predictability ( $M_{PT} = 1.75$ ;  $SD_{PT} = 0.93$ ;  $M_{PT} = 1.75$ ;  $SD_{pT} = 0.88$ ) (Table 4). Significant differences between respondents (Table 6) occur for the variable country in ratings of sense of influence (F=9.04; df=1; p=0.003), rewards (F=17.99; df=1; p<0.001) and social suport from colleagues (F=7.02; df=1; p=0.008). Polish officers have a higher sense of influence ( $M_{PI} = 1.76$ ;  $SD_{PI} = 0.81$ ;  $M_{PT} = 1.33$ ;  $SD_{PT} = 0.80$ ), but lower ratings of rewards (M<sub>PI</sub> = 2.11; SD<sub>PI</sub> = 0.83;  $M_{PT} = 2.42$ ;  $SD_{PT} = 0.96$ ) and social suport from colleagues (MPL = 2.01;  $SD_{PI} = 0.83$ ;  $M_{PT} = 2.30$ ;  $SD_{PT} = 0.82$ ). Analysis of variance indicates that there is no statistically significant variation in the results depending on the employment department. However, there are differences characterizing the interaction of independent variables that are worth noting (Table 6) where Portugal's Other department rates higher than the Security department on its rewards ( $M_{In} = 2.45$ ;  $SD_{In} = 0.87$ ;  $M_{O} = 2.18$ ;  $SD_0 = 0.72$ ; p<0.001), possibility of development ( $M_{In} = 2.64$ ;  $SD_{In} = 0.73$ ;  $M_0 = 2.31$ ; SD<sub>0</sub> = 0.86; p=0.033) and social climate at work ( $M_{In} = 2.90$ ;  $SD_{1p} = 0.99$ ;  $M_0 = 2.47$ ;  $SD_0 = 0.72$ ; p = 0.002) – Prison officers from the Other department score higher than the Penitentiary department (p=0.039).

	Social Support from colleagues	SD	0.525	0.885	0.789	0.827	0.872	0.716	0.951	0.823
	Social Support from colleagues	Μ	2.030	1.986	2.089	2.012	2.446	2.183	2.244	2.298
	Rewards	SD	0.604	0.887	0.710	0.831	0.864	0.954	1.003	0.963
	Rew	Μ	1.759	2.160	2.152	2.107	2.707	2.118	2.556	2.419
	Predictability	SD	0.809	0.959	0.911	0.930	0.957	0.800	0.884	0.879
	Predic	М	1.667	1.789	1.659	1.748	1.831	1.648	1.833	1.749
sdi	Social climate	SD	0.700	0.615	0.624	0.628	0.992	0.723	1.043	0.911
ly grou	Social o	Μ	2.572	2.735	2.776	2.722	2.904	2.466	2.422	2.637
le stud	Possibilities for development	SD	0.567	0.768	0.603	0.717	0.733	0.862	0.579	0.788
es in th	Possibil develo	Μ	2.395	2.489	2.294	2.439	2.640	2.305	2.500	2.468
source	Influence	SD	0.849	0.799	0.774	0.812	0.785	0.841	0.645	0.797
job re	Influ	Μ	1.481	1.868	1.585	1.763	1.428	1.213	1.450	1.334
ices of	Role clarity	SD	0.636	0.705	0.534	0.673	0.727	0.725	0.717	0.729
variar	Role o	М	2.840	2.793	3.073	2.854	3.009	2.826	2.722	2.885
es and		u	27	142	41	210	85	95	30	210
Table 4. Averages and variances of job resources in the study groups		DEPT	Other	Security	Penitenciary	Total	Other	Security	Penitenciary	Total
Table 4		Country DEPT	PL				ΡT			

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**Table 5.** F-statistic values for comparisons of the intensity of job resourcess perceived by prison .officers from the countries and departments surveyed ents surveyed

the countries and departments surveyed.	les	מווח חבן	Dat une	IIIS SUI	veyeu.										
		RoleC	Clarity	Influence	ence	Possibilities for development	Possibilities for development	Social Climate	tial 1ate	Predictability	ability	Rew	Rewards	Social Sup colle	Social Support from colleagues
term	df	F	p.	F	p.	F	p.	F	p.	F	p.	F	p.	F	p.
Overall model	1	2.075	0.068	8.472	0.000	2.306	0.044	3.972	0.002	0.608	0.694	7.857	0.000	3.593	0.003
Country	-	0.367	0.545	9.039	0.003	1.022	0.313	1.154	0.283	0.387	0.534	17.989	0.000	7.016	0.008
Dept.	5	1.008	0.366	0.347	0.707	0.835	0.435	1.033	0.357	0.047	0.954	1.672	0.189	1.122	0.327
Country * Dept.	2	2.863	0.058	5.745	0.003	3.462	0.032	5.317	0.005	1.329	0.266	9.916	0.000	0.637	0.529
Residual	414														
Adj R2		0.013		0.082		0.015		0.034		0.005		0.076		0.030	

Table 6. P-values of signific	cance of diff	erences in r	gnificance of differences in mean ratings of job resources for groups of respondents.	s of job resou	urces for gro	ups of resp	ondents.
contrast	Role Clarity	Influence	Possibilities for development	Social Climate	Predictability	Rewards	Social Support from colleagues
PL Other – PT Other	0.880	1.000	0.676	0.371	0.963	0.001	0.201
PL Security – PT Security	0.999	0.001	0.425	060.0	0.851	0.999	0.463
PL Penitenciary – PT Penitenciary	0.291	0.981	0.860	0.395	0.967	0.394	0.970
PL Other – PL Security	1.000	0.192	0.991	0.914	0.988	0.249	1.000
PL Other - PL Penitenciary	0.755	0.995	0.994	0.893	1.000	0.460	1.000
PL Security – PL Penitenciary	0.211	0.344	0.680	1.000	0.965	1.000	0.981
PT Other – PT Security	0.493	0.460	0.033	0.002	0.755	0.001	0.269
PT Other - PT Penitenciary	0.379	1.000	0.951	0.039	1.000	0.965	0.858
PT Security – PT Penitenciary	0.980	0.714	0.812	1.000	0.925	0.165	0.999





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#### Work burnout

Results indicate that prison officers in both countries experience moderate levels of burnout ( $M_{p_{I}} = 0.82$ ;  $SD_{p_{I}} = 0.44$ ;  $M_{p_{T}} = 1.24$ ;  $SD_{PT} = 0.55$ ). The mean results of the subjects by subgroups are included in Table 5. The analysis of variance (Table 8) showed significant differences between the subjects coming from different countries, and there is no variation in results by service department. Comparisons of overall work burnout scores indicate that the independent variables explained 16% of the variance in the dependent variable. Respondents from Portugal rated their level of work burnout slightly higher ( $M_{PL} = 0.82$ ;  $SD_{PL} = 0.44$ ;  $M_{pT} = 1.24$ ;  $SD_{pT} = 0.55$ ; F=57.52; df=1; p=0.05). Differences in evaluations are revealed with regard to two key departments: Security  $(M_{p_I} = 0.82; SD_{p_I} = 0.45; M_{p_T} = 1.31; SD_{p_T} = 0.61; p < 0.001)$  and Pen*itentiary* ( $M_{p_I} = 0.77$ ;  $SD_{p_I} = 0.42$ ;  $M_{p_T} = 1.38$ ;  $SD_{p_T} = 0.40$ ; p<0.001). The average ratings of employees of Other departments are similar (Table 8). In more detailed analysis of the individual dimensions of this construct, it's worth pointing out that in BAT's exhaustion subscale, there is a statistical tendency for ratings to differ between Poland and Portugal in some job departments. This is the cause of higher estimates made by Portuguese prison officers working in the Security and Penitentiary. For the dimension of distancing, the revealed differences apply to only one cross-country comparison. The group of Security employees in Portugal rated their level of distancing higher than the corresponding group in Poland (p<0.001). In terms of distancing, surveys from Portugal employed in the Other and Security are differ (see Table 9). The Security officers have a significantly higher score (Table 7). The same phenomenon can be said for the dimension on cognitive functioning deterioration as for the results for the whole construct of work burnout. Differences in the combination of countries (F=47.02; df=1; p<0.001) and interaction of independent variables (F=4.26; df=2; p=0.014) turned out to be significant. Employees of the Security and Penitentiary in both countries score differently on this component of work burnout - Portugal employees score significantly higher than Polish officers. When assessing emotional functioning, Portuguese employees scored higher ( $M_{pr} = 0.33$ ;  $SD_{p_1} = 0.35; M_{p_T} = 0.89; SD_{p_T} = 0.60; F = 106.1; df = 1; p < 0.001)$  and this applies to all departments, while being the lowest in the evaluations in the study group (Table 7).

Table 7.	Table 7. Averages and		variances of work burnout in the study groups.	ork burn	out in th	le study g	groups.						
			Work Bt	Work Burnout BAT	BAT Exhausti	BAT Exhaustion	BAT Distancing	ing	ΕOξ	BAT Cognitive	Eme	BAT Emotional	
Country	DEPT	-	W	ßD	W	SD	M	ß	M	SD	W	SD	
	Other	27	0.897	0.391	1.471	0.502	0.830	0.583	0.707	0.443	0.322	0.303	
	Security	142	0.818	0.449	1.279	0.643	0.770	0.649	0.653	0.537	0.348	0.358	
1	Penitenciary	41	0.768	0.420	1.259	0.636	0.822	0.724	0.523	0.465	0.254	0.324	
	Total	210	0.819	0.436	1.300	0.626	0.788	0.653	0.635	0.514	0.326	0.345	
	Other	85	1.116	0.515	1.647	0.758	0.755	0.621	0.956	0.620	0.814	0.567	
J	Security	95	1.305	0.609	1.816	0.800	1.123	0.743	1.029	0.687	0.937	0.659	
	Penitenciary	30	1.383	0.397	1.934	0.520	1.024	0.548	1.296	0.509	0.954	0.498	
	Total	210	1.239	0.553	1.764	0.753	0.960	0.689	1.038	0.644	0.890	0.602	
Table 8.	Table 8. F-statistic val	values fo	ues for comparisons of the intensity of work burnout perceived by prison .officers from	isons of	the inter	nsity of w	ork burr	iout pei	rceivec	l by pri	son .offic	cers from	
the coun	the countries and departments surveyed.	departme	nts survey	yed.									
		Work Burnout BAT	nout BAT	Exha	Exhaustion	Di	Distancing		Cognitive	0	Emotional	ional	
term	df	F	p.	F	p.	F	p.	F		p.	F	p.	
Overall model	1 1	17.360	0.000	10.880	0.000	4.312	0.001	12.138	38	0.000	28.581	0.000	
Country	1	57.521	0.000	32.608	0.000	4.211	0.041	47.017	17	0.000	106.095	0.000	
Dept.	5	0.469	0.626	0.133	0.876	1.639	0.195	0.433	33	0.649	0.736	0.479	

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contrast	Work Burnout BAT	exhaustion	distancing	cognitive	emotional
PL Other – PT Other	0.345	0.859	0.996	0.374	0.001
PL Security – PT Security	0.001	0.001	0.001	0.001	0.001
PL Penitencjarny – PT Penitenciary	0.001	0.001	0.804	0.001	0.001
PL Other – PL Security	0.974	0.770	0.998	0.998	1.000
PL Other – PL Penitenciary	0.897	0.816	1.000	0.794	0.994
PL Security – PL Penitenciary	0.992	1.000	0.998	0.802	0.890
PT Other – PT Security	0.109	0.568	0.003	0.960	0.548
PT Other – PT Penitenciary	0.112	0.367	0.396	0.065	0.763
PT Security – PT Penitenciary	0.974	0.965	0.980	0.238	1.000

**Table 9.** Significance of differences in BAT variable for pairwise compar-isons (p for post-hoc)

### Work engagement

The level of work engagement in Polish and Portugal groups oscillates around the midpoint of the scale, which means experiencing engagement just several times a month ( $M_{PI} = 3.18$ ;  $SD_{PI} = 0.95$ ;  $M_{PT} = 3.76$ ;  $SD_{pr} = 1.59$ ) The analysis of variance (Table 10) indicate that in Portugal, the level of work engagement is higher than in Poland (F=17.03; df=1; p<0.001). This regularity is found in all dimensions of this construct. Differences in the level of work engagement between employees working in different departments were revealed: absorption (F=12.31; df=1; p<0.001) and dedication (F=7.23; df=1; p<0.001). Differences in scores between some pairs of subgroups (F=4.72; df=1; p=0.009) which indicates an interaction of independent variables (Table 11). The group of Portuguese Other department employees stands out and their scores significantly exceed those of their colleagues in the Security (p=0.001)and Polish officers in this category by more than 1 point (p=0.005) (Table 10). The difference between the groups is revealed in two of the three dimensions of work engagement: vigor (p=0.001) and dedication (p=0.027), with the third reaching the level of statistical trend (Table 11). The low engagement score for Portugal Security department was noted, which applies to all dimensions of work engagement (Table 10). The difference between the scores of this group and in Other group, is significant for vigor, dedication and absorption respectively: p=0.023; p=0.001; p=0.001 (Table 12). Apsorption is also a significant difference

Table 10.	Table 10. Averages and variances of work engagement in the study groups	nd vari:	ances	of wor	k engage	ment in t	the study g	roups			
				Work enga	Work engagement UWES	S	vigor	at	absorbtion	ded	dedication
Country	DEPT		u	W	SD	M	ß	M	SD	M	SD
	Other		27	3.253	0.792	3.063	1.019	3.310	0.828	3.377	1.120
10	Security		142	3.150	066.0	3.225	1.061	2.911	1.143	3.315	1.096
ΓL	Penitenciary		41	3.238	0.897	3.255	0.950	2.951	1.094	3.512	1.073
	Total		210	3.181	0.946	3.210	1.032	2.970	1.101	3.362	1.092
	Other		85	4.263	1.284	4.277	1.381	4.134	1.546	4.352	1.365
	Security		95	3.239	1.747	3.644	1.782	2.994	1.807	3.078	1.949
ГI	Penitenciary		30	3.988	1.400	3.967	1.664	4.278	1.224	3.680	1.746
	Total		210	3.760	1.594	3.946	1.633	3.639	1.728	3.679	1.797
able 11.	<b>Table 11.</b> F-statistic values for comparisons of the intensity of work engagement perceived by prison .officers from the countries and departments surveyed.	values f nd depa	or cor artmer	alues for comparisons of d departments surveyed.	ons of th veyed.	e intensit	y of work	engageme	nt perceiv	ed by prise	on .office
			Work E	Ingageme	Work Engagement UWES	vi	vigor	abso	absorbtion	dedi	dedication
term		df	H		p.value	F	p.value	F	p.value	F	p.value
Overall model		1	10.466	96	0.000	8.225	0.000	12.738	0.000	8.244	0.000
Country		1	17.030	30	0.000	24.102	0.000	20.788	0.000	3.212	0.074
Dept.		2	7.195	5	0.001	1.110	0.331	12.306	0.000	7.228	0.001
Country * Dept.		2	4.723		0.009	2.624	0.074	6.151	0.002	5.417	0.005
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0.080

0.123

0.079

0.101

414

Residual Adj R<sup>2</sup> in *Penitentiary* employee (p=0.001). Moreover, statistically significant difference between absorption scores among *Penitentiary* employees in both countries was notice. Again, the results collected in Portugal are higher than the Polish results ( $M_{PL} = 2.95$ ;  $SD_{PL} = 1.11$ ;  $M_{PT} = 4.28$ ;  $SD_{PT} = 1.22$ ; p=0.001). This gives an overall picture of the differences in the experience of work engagement in the prison officers groups from two countries.

contrast	Work Engagement UWES	vigor	absorbtion	dedication
PL Other – PT Other	0.005	0.001	0.081	0.027
PL Security – PT Security	0.995	0.185	0.998	0.811
PL Penitencjarny – PT Penitenciary	0.140	0.247	0.001	0.997
PL Other - PL Security	0.999	0.993	0.746	1.000
PL Other - PL Penitenciary	1.000	0.993	0.903	0.999
PL Security – PL Penitenciary	0.999	1.000	1.000	0.972
PT Other – PT Security	0.001	0.023	0.001	0.001
PT Other – PT Penitenciary	0.912	0.891	0.997	0.237
PT Security – PT Penitenciary	0.057	0.865	0.001	0.340

Table 12. Significance of differences in UWES variable (p for post-hoc).

# Discussion

The answer to the research question posed, in the light of the results collected, indicates that there are differences in the perception of work demands and resources and the reactions to them among Polish and Portuguese employees working in different departments of Prison Service. Reactions to worka are different between the countries emerged – officers from Portugal experience stronger work burnout than Polish employees. At the same time, they also claim to experience a state of work engagement more often. The intensity of burnout among prison officers in the light of the present study is, however, not high. Particularly low scores are obtained by employees from Poland. However, it is also lower in Portugal than expected on the basis of previous reports focusing on the negative aspects of this work. This observation is inconsistent with

research showing that prison officers experience stress<sup>33</sup>, high level of work burnout<sup>34</sup> and negative health consequences of working in prisons may be the result of a change in perspective. Emphasising only work burnout and its determinants in the study focuses the respondents on the negative sides of the job and may lead to negative evaluations. The results of the Polish respondents may also be explained by the fact that the NCO course participants surveyed in Poland had not yet managed to burn themselves out. However, the sample from Portugal that was collected in penitentiary centres also has moderate results, although they are higher than in the Polish sample. Therefore, it is worthwhile to undertake research into the phenomenon of reactions to work without focusing solely on one aspect (neither negative nor positive). The level of burnout may also be decreasing compared to previous studies due to improvements in officers' working conditions. Data from Central Board of Prison Service in Warsaw on the restructuring of the Prison Service in Poland may confirm this. Another important observation of this research is the relatively small differences in the ratings of the analysed variable between the departments of the service. It appears that the level of burnout is characteristic of the entire prison service regardless of work department and country. Only one group of officers in this case stands out from the another employees it is the Other department officers from Portugal who tend to estimate their level of burnout lower. This is a group that is less in direct contact with inmates. The level of work engagement is a more variable than work burnout in the survey. Significant differences apply not only to country comparisons but also to some service departments. In general, work engagement is rated as higher in Portugal, especially in the Other department, while the Security department scores lowest. This suggests that even if there are fewer resources in than in other departments and perhaps there exist more job demands, although this is not a group with higher levels of burnout.

In our study, we noticed a lower level of rewards, a poorer social climate and development opportunities in *Other* departments employees. Also, compared to the Polish officers, portugal scores are lower in the aspect of sense of influence. A statistical trend in this comparison is also shown by the difference in the assessment of the social climate. Portugal

<sup>&</sup>lt;sup>33</sup> A. Piotrowski, *Stres zawodowy a konflikty pomiędzy pracą a rodziną personelu medycznego Służby Więziennej.* "Przegląd Naukowo-Metodyczny. Edukacja dla Bezpieczeństwa", 2014, no 2(23), pp. 295-306.

<sup>&</sup>lt;sup>34</sup> E.Sygit-Kowalkowska et al., ... pp.1-24.

Security employees require more attention from their managers and some organisational changes to increase their work resources in order to raise their level of work engagement. Analysing the data on perceptions of work in terms of requirements and resources, an interesting conclusion can be drawn that officers from both countries have no fear of losing their jobs, which build a sense of job security in this profession <sup>35</sup>. The absence of job insecurity stress source narrows the number of stressors affecting employees and reduces the risk of burnout, as mentioned above. On the other hand, the work demands rated highest are cognitive demands, emotional demands and work pace. Their level of intensity in both countries is rated as the strongest. They are all related to the content of the work performed and are derived from organisational decisions. This shows the need for preventive measures to reduce the intensity of these impacts by e.g. organisational changes or/and job crafting training initiatives. It consists of the introduction of small improvements in one's work by the employee himself (bottom-up strategies), which are tailored to his capabilities and needs <sup>36</sup>. Cognitive demands are rated highest by Polish Security officers and Portugal Penitentiary officers, which indicates the importance of 'front line' work as a source of intensity of difficult experience. Emotional demands also occur much more strongly when dealing with prison staff in direct contact with inmates. This stressor primarily affects those involved in constant and demanding assisting inmates, because the highest scores in both countries are obtained by *Penitentiary* Department staff. The requirement described as work pace, two groups of respondents from Portugal (Others and Security) rate close to average. The Other employee groups believe that they are affected to a large extent. This suggests a need to change the situation. In the light of the present research, a diversity of evaluations concerning the amount of work becomes apparent. The group with an exceptionally low assessment of this requirement are the Portuguese employees in the Other department. For them, the level of intensity can be described as occurring 'to a small extent'. The analysis of the results of the work resource estimates in the prison service indicates several aspects that differentiate between Polish and Portuguese employees. The most pronounced difference in

<sup>&</sup>lt;sup>35</sup> H.De Witte, T.Vander Elst, N.De Cuyper, *Job insecurity, health and well-being*. In: J. Vuori, R. Blonk, R. H. Price (eds.), Sustainable working lives: Managing work transitions and health throughout the life course (p.109–128), 2015,. Springer Science and Business Media.

<sup>&</sup>lt;sup>36</sup> A.Wojtczuk-Turek, Przekształcanie pracy. Perspektywa pracownika i organizacji, Warszawa 2020.

the ratings of rewards. In the Siegrist's model<sup>37</sup> this is a key element in the evaluation of the work situation translating into the stress experienced. Polish officers believe that they are less well rewarded than their Portuguese colleagues. Which suggests a difficulty in experiencing higher level of well-being at work. This mechanism is illustrated by the JD-R theory, in which negative experiences at work undermine engagement<sup>38</sup> The belief that rewards are weakest is most pronounced among Polish officers from the Other department. Which prompts attention in Poland to this group of employees, whose job resources should be increased. At the same time, Polish officers can count on the help of colleagues less often than in Portugal. However, it is difficult to identify specific differences in this aspect, even if the strucures of both countries prison services don't differ much. The job resource that is perceived by Polish officers to be more present in their work is a sense of influence, when the exeption is *Security* officers from Portugal, because they rate this aspect lower than Polish employees. However, this resource is rated as having the lowest intensity. It can be said that, in general, prison officers have the belief that they have little influence on their work<sup>39</sup>. Penitentiary officers have no high expectations due to the profession being exercised within a total institution. Under this assumption, it can be expected that it will not be an important aspect of the assessment of labour resources. There is an interesting phenomenon in this case The lowest and highest average impact scores are found in Security. In Poland, this is the highest score suggesting that employees have an average strength of conviction about their ability to shape their work, while at the same time, in Portugal, employees in this department believe to a low degree.

## Conclusions

A comparison of the two countries shows that differences in the penitentiary systems translate into some differences in work evaluation. This applies mainly to job demands. Interestingly, the higher level of

<sup>&</sup>lt;sup>37</sup> J.Siegrist, D.Starke, T.Chandola, I.Godin, M.Marmot, I.Niedhammer, R.Peter, *The measurement of effort-reward imbalance at work: Euro-pean comparisons*, "Social Science and Medicine", 2004, no 58(8), pp.1483–1499.

<sup>&</sup>lt;sup>38</sup> A.B.Bakker, E.Demerouti, A.Sanz-Vergel, ... pp. 25-53.

<sup>&</sup>lt;sup>39</sup> D.Grabowski, *Etyka pracy: przekonania wartościujące pracę a zaangażowanie pracowników*, Katowice 2015.

perceived demands found in Poland is not reflected in the evaluation of work burnout. This indicates a need for further research. Perhaps some dimensions rated higher are less important for the development of burnout ratings. It would be worthwhile to determine during longitudinal or experimental studies how strongly individual requirements influence professional burnout. In the case of those studies that were cross-sectional (cross-sectional), testing this hypothesis would have a methodological drawback. An interesting phenomenon is that Portugal studies obtain higher results for both engagement and burnout. This result is worth discussing a unidimensional definition of burnout and engagement and suggest existence of two independent dimensions<sup>40</sup>. The result obtained suggests a two-dimensional model. However, it is worth exploring this phenomenon further on other groups of respondents.

## Limitations and Future research

The study has several limitations (e.g. data originating from self-reports). It is also not possible to speak of causality in relation to the extracted variables. On the other hand, it should be mentioned that the study dealt with sensitive issues in a specific and difficult research group (uniformed profession), which requires great care for the protection of personal data. The demographic profile of respondents representing Polish and Portuguese groups indicates that, despite the different sampling strategy in each country, it was possible to collect opinions from a diverse population of prison officers in terms of gender, age, location of penitentiary units or employment department. Despite this, there is a concern that the results may not reflect the views and experiences of the entire population of prison staff, which is a challenge to conduct further research on a larger scale. Four key variables to explain employee wellbeing were considered, but the inclusion of more variables would allow a more complete picture to be developed of the determinants of prison officers' work capturing both the 'positive loop' and the 'negative loop' described in JD-R model. Attention was also drawn to the risk of bias in the survey, where individual differences and contextual factors (e.g.

<sup>&</sup>lt;sup>40</sup> W.B. Schaufeli, S. Desart, H.De Witte, *Burnout Assessment Tool (BAT)-Development, Validity, and Reliability. International "International Journal of Environmental Research and Public Health".* 2020, no 17(24), pp.94-95.

negative affect due to difficult situations experienced by respondents outside the workplace) may have been the reason for the way in which questionnaires were answered. It was pay attention to eliminate common method bias, but future studies of this working environment should control potentially confounding factors on a larger scale. Furthermore, in the future, it would be worth extending the research to include a larger group of respondents (officers) from other services, given the perceived paucity of knowledge on the determinants of the working environment of the uniformed professions.

### Literature

- Bakker, A.B., Demerouti, E., Sanz-Vergel, A., *Job demands-resources theory: Ten years later*, Annual Review of Organizational Psychology and Organizational Behavior, 2023, no 10.
- Baka Ł., Prusik M., Pejtersen J.H., Grala K., Full evaluation of the psychometric properties of COPSOQ II. One-year longitudinal study on Polish human service staff. PLoS One. 2022 Jan 26;17(1):e0262266. doi: 10.1371/journal.pone.0262266.
- Bakker, A. B., Demerouti, E., Taris, T. W., Schaufeli, W. B., Schreurs, P. J. G., A multigroup analysis of the job demands-resources model in four home care organizations, International Journal of Stress Management, 2003, no 10(1), pp.16–38. https://doi. org/10.1037/1072-5245.10.1.16
- Bakker A.B., Oerlemans, W.G.M., Subjective well-being. [w:] K.S. Cameron, G.M. Spreitzer (eds.), The Oxford handbook of positive organizational scholarship (pp.178–187), Oxford 2012.
- Bakker A.B., Schaufeli W.B., Leiter M., Taris T.W., *Work engagement: An emerging concept in occupational health psychology*, Work and Stress, 2008, no 22(3). https://doi.org/10.1080/02678370802393649.
- Basinska B., Gruszczyńska E., Schaufeli W., The Polish adaptation of the Burnout Assessment Tool (BAT-PL) by W. Schaufeli et al., Psychiatria Polsk 2021, no. 57, pp.1-13. 10.12740/PP/OnlineFirst/141563.
- De Witte, H., Job Insecurity and Psychological Well-being: Review of the Literature and Exploration of Some Unresolved Issues, European Journal of Work and Organizational Psychology, 1999, no 8(2), pp.155-177. DOI: 10.1080/135943299398302.
- Demerouti, E., Bakker, A.B., Nachreiner, F., Schaufeli, W.B., *The job demands-re-sources model of burnout*, Journal of Applied Psychology, 2001, no 86(3), pp.499–512. https://doi.org/10.1037/0021-9010.86.3.499.
- Demerouti, E., Bakker, A.B, *The Job Demands– Resources model: Challenges for future research*, Journal of Industrial Psychology, 2011, no 37(2), pp.1-9. doi:10.4102/sa-jip.v37i2.974
- Finney, C., Stergiopoulos, E., Hensel, J., Organizational stressors associated with job stress and burnout in correctional officers: a systematic review, BMC Public Health, 2013, no 13, p.82. https://doi.org/10.1186/1471-2458-13-82.
- Grabowski D. *Etyka pracy : przekonania wartościujące pracę a zaangażowanie pracowników.* Katowice 2015, Wydawnictwo Uniwersytetu Śląskiego.
- Hadžibajramović, E., Schaufeli, W. & De Witte, H., *Shortening of the Burnout Assessment Tool (BAT)—from 23 to 12 items using content and Rasch analysis.* BMC Public Health 2022, no **22**, p.560. https://doi.org/10.1186/s12889-022-12946-y.

- Kinman, G., Clements, A. J., Hart, J.. Work-related wellbeing in UK prison officers: A benchmarking approach, International Journal of Workplace Health Management, 2016, no 9(3), 290–307. doi.org/10.1108/IJWHM-09-2015-0054.
- Maslach, C., Leiter, M. P., *Early predictors of job burnout and engagement*, Journal of Applied Psychology, 2008, no 93(3), 498–512. https://doi.org/10.1037/0021-9010.93.3.498.
- Meijman, T. F., Mulder, G., *Psychological aspects of workload*. In: P.J.D.Drenth, H.Thierry, C.J.de Wolff (eds.), Handbook of work and organizational: Work psychology (p.5–33). Psychology Press Taylor and Francis, Washington 1998.
- Mielniczuk, E., Łaguna, M., *The factorial structure of job-related affective well-being: Polish adaptation of the Warr's measure*, International Journal of Occupational Medicine and Environmental Health, 2018, no 31(4).
- Nowicka-Kostrzewska, J., Rożnowski, B., Personality in prison uniform. The influence of personality on building work engagement, applying job crafting strategies and well-being among prison oficer. Current Issues in Personality Psychology. 2023, no 11(4), pp.283-296. https://doi.org/10.5114/cipp.2021.110059.
- Piotrowski A., *Stres zawodowy a konflikty pomiędzy pracą a rodziną personelu medycznego Służby Więziennej*, Przegląd Naukowo-Metodyczny. Edukacja dla Bezpieczeństwa, 2014, no 2(23).
- Piotrowski A., Poklek R., Niedopasowanie organizacyjne a wypalenie zawodowe wśród personelu penitencjarnego. In: J. Maciejewski, M. Stochmal (red.), Metodologiczne problemy w badaniach grup dyspozycyjnych (pp.354-375). Wydawnictwo Uniwersytetu Wrocławskiego, Wrocław 2014. 10.13140/RG.2.1.4203.2088.
- Piotrowski A., *Stres zawodowy a konflikty pomiędzy pracą a rodziną personelu medycznego służby więziennej*, Przegląd Naukowo-Metodyczny. Edukacja dla Bezpieczeństwa, 2014, np. 2.
- Rożnowski, B., Fortuna, P. (eds.), Psychologia biznesu. PWN, Warszawa 2020.
- Schaufeli W.B, Desart S, De Witte H. Burnout Assessment Tool (BAT)—Development, Validity, and Reliability, International Journal of Environmental Research and Public Health. 2020, no 17(24), pp.94-95. https://doi.org/10.3390/ijerph17249495.
- Schaufeli W.B., Bakker A.B., Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study, Journal of Organizational Behavior, 2004, no 25(3), pp.293–315. https://doi.org/10.1002/job.248.
- Schaufeli, W.B., Bakker A.B., Van Rhenen, W. How changes in job demands and resources predict burnout, work engagement and sickness absenteeism, Journal of Organizational Behavior, 2009, no 30(7), pp.893–917. https://doi.org/10.1002/job.595
- Schaufeli W.B., Bakker A.B., Van Rhenen W., How changes in job demands and resources predict burnout, work engagement and sickness absenteeism, Journal of Organizational Behavior, 2009, no 30(7), pp.893–917. https://doi.org/10.1002/job.595.
- Schaufeli W.B., Maslach C., Marek T. (eds.), *Professional burnout: Recent developments in theory and research*, Taylor and Francis, Washington 1993.

- Schaufeli W.B., Salanova M., González-Romá V., Bakker A.B, *The measurement of engagement and burnout: A two sample confirmatory factor analytic approach*. Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being, 2002, no 3(1), pp.71–92. https://doi.org/10.1023/A:1015630930326.
- Schaufeli W.B., Salanova M., González-Romá V., Bakker A.B., *The measurement of engagement and burnout: A two sample confirmatory factor analytic approach*, Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being, 2002, no 3(1), pp.71–92. https://doi.org/10.1023/A:1015630930326.
- Schaufeli W., Bakker A., *Utrecht work engagement scale: Preliminary manual.* Utrecht: Occupational Health Psychology Unit, Utrecht 2003.
- Schaufeli W.B., Enzmann D., *The burnout companion to study and practice: A critical analysis.* Taylor and Francis, Philadelphia 1998.
- Siegrist J., Starke D., Chandola T., Godin I., Marmot M., Niedhammer I., Peter R., *The measurement of effort reward imbalance at work: Euro-pean comparisons*, Social Science and Medicine, 2004, no 58(8).
- Sygit-Kowalkowska E., Piotrowski A., Hamzah I., Insomnia among Prison Officers and Its Relationship with Occupational Burnout: The Role of Coping with Stress in Polish and Indonesian Samples. International Journal of Environmental Research and Public Health, 2021, no 18(8), pp.4282. doi: 10.3390/ijerph18084282.
- Szabowska-Walaszczyk, A., Zawadzka, A.M., Wojtaś, M., Zaangażowanie w pracę *i jego korelaty: adaptacja skali UWES autorstwa Schaufeliego i Bakkera*, Psychologia Jakości Życia. 2011, no 10.
- Wojtczuk-Turek, A., *Przekształcanie pracy. Perspektywa pracownika i organizacji*, PWN, Warszawa 2020.
- Xanthopoulou D., Bakker A.B., Demerouti E., Schaufeli W.B, *The role of personal resources in the job demands-resources model*, International Journal of Stress Management, 2007, no 14(2). https://doi.org/10.1037/1072-5245.14.2.121.

#### Legislative acts:

- Ustawa z dnia 9 kwietnia 2010r. o Służbie Więziennej (Dz.U.2010 nr79 poz.523). https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20100790523/U/D20100523Lj. pdf.
- Ustawa z dnia 6 czerwca 1997 r. Kodeks Karny Wykonawczy https://isap.sejm.gov. pl/isap.nsf/DocDetails.xsp?id=wdu19970900557.

#### Netography:

Código da Execução das Penas e Medidas Privativas da Liberdade. Consulted at November 22nd 2023 at: https://www.ministeriopublico.pt/iframe/codigo-de-ex-ecucao-de-penas

- Direção-Geral de Reinserção e Serviços Prisionais (2022). Estabelecimentos Prisionais. Consulted at November 22nd 2023 at: https://dgrsp.justica.gov.pt/Contactos/Estabelecimentos-Prisionais
- Direção-Geral de Reinserção e Serviços Prisionais [DGRSP] (2023). Recursos Humanos. Consulted at November 22nd 2023 at: https://dgrsp.justica.gov.pt/Portals/16/Recursos%20Humanos/Mapa\_Pessoal/mp\_pssl-2023.pdf?ver=7PUqb-4N3XDzk-9rEHrdNnQ%3d%3d
- RASI (2022). Consulted at November 22nd 2023 at: https://www.portugal.gov.pt/download-ficheiros/ficheiro.aspx?v=%3d%3dBQAAAB%2bLCAAAAAABAAzN-DazMAQAhxRa3gUAAAA%3d
- Reshape (2023). Consulted at November 22nd 2023 at: https://reshape.org/explicar-o-sistema/as-prisoes/
- https://www.portugal.gov.pt/download-ficheiros/ficheiro.aspx?v=%3d%3dBQA-AAB%2bLCAAAAAABAAzNDazMAQAhxRa3gUAAAA%3d).

https://www.gov.pl/web/sprawiedliwosc/program-reform-nowoczesne-wieziennictwo