Resilience as a predicator of mental health of incarcerated women

Ewa Sygit-Kowalkowska[1], Justyna Szrajda[2], Magdalena Weber-Rajek[3], Krzysztof Porażyński[4], Marcin Ziółkowski[5]

[1] Institute of Psychology, Kazimierz Wielki University in Bydgoszcz

[2] Department of Hygiene, Epidemiology and Ergonomics, Nicolaus Copernicus University, Collegium Medicum in Bydgoszcz

[3] Department of Physiotherapy, Nicolaus Copernicus University, Collegium Medicum in Bydgoszcz

[4] Prison officer, retired

[5] Department of Preventive Nursing, Division of Psychiatric Nursing, Nicolaus Copernicus University in Torun, Collegium Medicum in Bydgoszcz

Summary

Introduction. Serving a prison sentence is an experience that bears the hallmarks of a trauma. Scientific findings on how people handle traumatic experiences show that there are numerous personal and social resources that allow for better adaptation. One of the concepts used to describe the process reflecting relatively good adaptation is psychological resilience.

Aim. The aim of the following research was to analyze the way in which psychological resilience differentiates mental states of incarcerated women and to identify the predicator of mental well-being in this group.

Material and method. The study included women incarcerated in the External Department of Czersk Penitentiary for juvenile female offenders who serve a prison sentence for the first time and penitentiary recidivists. The following scales were used in the research: the Resilience Measurement Scale – RMS-25 and the HADS-M scale, which allows to conduct a test for symptoms of depression.

Results. The results revealed crucial statistical correlations between the results of the resilience scale and results of the HADS-M. It was also found that the predicators of anxiety and depression in the study group are the level of personal coping skills and tolerance of negative emotions (RMS-25). Additionally, a crucial factor in predicting the state of anxiety

is the number of years of imprisonment. The conducted regression analysis also showed that the level of personal coping skills and tolerance of negative emotions (RMS-25) as well as openness to new experiences and sense of humor (RMS-25) are essential predicators of the level of aggression.

Conclusions. The concept of psychological resilience is significant in analyzing the differences in mental health of incarcerated women and may help to create conditions that are conducive to reducing negative effects of prisoners staying in conditions of institutional constraint.

Key words: resilience, incarcerated women, mental state

Introduction

Scientific findings on how people handle traumatic experiences show that there are numerous personal and social resources that allow for better adaptation. These include: an optimistic attitude, self-esteem and self-efficacy, using social support, altruistic attitude, empathy, high intelligence, self-assessment and sense of humor [1–3]. Specific human characteristics serve protective functions and despite numerous burdens and accumulating stressors, they help people to handle difficulties [4]. One of the concepts used to describe the process reflecting relatively good adaptation is psychological resilience of people [5]. Its key feature is flexible adaptation to living conditions despite traumatic experiences. The *resilience theory* is used to predict the course of post-traumatic disorders of an individual as well as to develop and undertake different forms of intervention alleviating their negative effects [4]. Psychological resilience can be developed and shaped through strong motivation, willingness to learn as well as a flexible approach to one's behavior [6, 7].

Imprisonment in solitary confinement is undoubtedly a traumatic experience. According the Erving Goffman's theory on total institutions, the environment of a penitentiary not only isolates prisoners from the external world and forces them to submit to the rules and regulations, but also deprives them of individualism and possibilities to fulfill their basic needs, including the need for security [8]. In their analysis of literature on this subject, Wawrzyniak et al. [9] demonstrate that the functioning of a person incarcerated in a penitentiary is associated with experiencing mainly negative emotions: deteriorated mood, sense of threat, violence and aggression. Exposure to such states is part of an experience that bears the hallmarks of a trauma. According to Sadowska et al. [10] deterioration of mental health of prisoners often results from the lack of hope for improvement of their situation in the face of many years isolation.

The incarceration rate (number of people sentenced to imprisonment per 100,000 residents) in Poland was 106 in 1989, 235 in 2006, and in the years 2008–2010 the rate reached the average value of 228, and in the year 2013 – 219 [11]. The above-presented data show that the rate grew considerably, which means that also the number of people potentially exposed to mental health problems is growing. Data collected as of 30 September 2015 show that among persons incarcerated in penitentiary institutions (72,609 prisoners) there are 3.4% of women [11]. Although women constitute only

a small percentage of all prisoners, the data show that 50% to 64% of that population experience mental health problems in conditions of solitary confinement [12].

Aim

The aim of the following research was to analyze the way in which psychological resilience differentiates the mental state of incarcerated women and to identify the predicator of mental health in this group. Moreover, the influence of sociodemographic factors was taken into account.

Material and method

The research was approved by the Bioethics Committee of Nicolaus Copernicus University, Collegium Medicum in Bydgoszcz (KB 613/2015). The study included women incarcerated in the External Department of Czersk Penitentiary for juvenile female offenders who serve a prison sentence for the first time and penitentiary recidivists.

The research was conducted anonymously. Questionnaires were placed in a room with access for all prisoners. The questionnaire envelope had an attached note which explained the purpose of the research. After completing the questionnaires, respondents put them into a specially prepared "ballot box". Such a method of collecting data does not classify the material as a random sample, since the questionnaires were completed only by volunteers. Nevertheless, this way of gathering data was optimal, as it allowed to maintain full confidentiality and anonymity.

In total, 46 women at the age from 25 to 64 were examined (average age of 35.95). The statistical analysis excluded 4 questionnaires due to incompleteness of the provided data.

The study group was divided in terms of the length of stay in the penitentiary:

- up to one year – 8 women;
- 1–3 years – 20 women;
- 4–6 years – 9 women;
- 7–10 years – 5 women;

The following scales were used in the research:

1. The Resilience Measurement Scale – RMS-25 by Ogińska-Bulik and Juczyński [13]. The scale allows for measuring the overall level of resilience, treated as a personality trait, as well as its five constituent factors:
   - perseverance and proactive approach;
   - openness to new experiences and sense of humor;
   - personal coping skills and tolerance of negative emotions;
   - tolerance of failures and treating life as a challenge;
   - optimistic attitude to life and the ability to mobilize oneself in difficult situations.

The above enumerated characteristics are evaluated on a 5-degree Likert scale (from 0 – strongly disagree, to 4 – strongly agree). The higher the result, the higher the level of resilience. A resilience scale result constitutes a sum of five factors, covering 5 items. The overall result of RMS-25 may be expressed in sten scores, where results between 1–4 sten stand for low resilience, 5–6 sten – medium resilience, and 7–10 sten – high resilience. The scale achieved satisfactory psychometrical characteristics (reliability measured with Cronbach's alpha coefficient is 0.89; while absolute stability measured by a test-retest method after 4 weeks is 0.85).

2. The HADS-M scale (Hospital Anxiety and Depression Scale by Zigmond and Snaith) modified by Majkowicz, de Walden-Gałuszko, Chojnacka-Szawłowska [14]. The scale allows for conducting a test for symptoms of depression. The HADS-M scale contains 16 questions, each with the following answers to choose from: strongly agree, agree, disagree and strongly disagree. The scale consists of three subscales: depression, anxiety and aggression. Two independent subscales, each containing seven statements, independently refer to anxiety and depression. An examined person may receive from 0 to 3 points for each of them. Two statements evaluating the level of aggression were added to the original version of the HADS scale. The maximum result separately for anxiety and depression is 21 points, while for aggression (irritation) – 6 points. For anxiety and depression the results are interpreted as follows: 0–7 points – no disorders; 8–10 – borderline states; 11–21 – disorders. In the case of aggression (irritation) the diagnostic result is > 5 points. The HADS scale is a universally applied method of measuring anxiety and depression both in psychiatric practice and in examining mentally healthy persons. Validation tests of the basic and modified versions of the HADS scale showed its satisfactory reliability and accuracy also with respect to the group of prisoners [15].

In order to measure sociodemographic variables (age, length of stay in the penitentiary) respondent's particulars were included in the survey.

The following questions were asked:

1. What is the mental state of the respondents in terms of depression, anxiety and aggression?
2. What is the level of psychological resilience of the respondents (overall level and the level of its five constituent factors)?
3. Is there any correlation between the respondents' mental state in terms of depression, anxiety, aggression and psychological resilience (overall level and its five constituent factors)?
4. Is there any correlation between sociodemographic variables (age, length of stay in the penitentiary) and the mental state as well as psychological resilience of the respondents?
5. What is the predicator of the mental state of women incarcerated in the penitentiary?

For the purposes of statistical analysis Statistica 12.0. software was used. In order to assess consistency of distribution of the examined variables with normal distribu-

tion, the Shapiro-Wilk test was applied. The results were presented as the arithmetic mean with a standard deviation (SD). The correlation between the examined variables was tested using Spearman's rank correlation (Spearman's rho). A step-wise multiple regression analysis was conducted in order to create a model based solely on relevant predicators. The hypotheses were verified at the significance level of $\alpha = 0.5$.

Results

Temporary standards and average results of the studies described in literature regarding those research tools were used.

As far as the level of resilience is concerned (RMS-25 scale):

- low results were obtained by 20 respondents (47.6%);
- average results were obtained by 7 respondents (16.7%);
- high results were obtained by 15 respondents (35.7%);

The HADS-M scale results were as follows:

- no anxiety disorders found in 11 respondents (26.2%);
- borderline states found in 2 respondents (4.8%);
- results indicating disorders were discovered in 29 respondents (69%).

The analysis of the depression subscale showed that 47.6% of examined women obtained results which indicated lack of disorders; borderline states were found in 5 women (12%), whereas 17% of respondents (40.4%) suffered from depression. The aggression (irritation) subscale analysis showed that 2 of the examined women achieved the diagnostic result. Table 1 presents results of the analyzed variables in the entire examined group.

Table 1. **Results of the analyzed variables**

Variable		N	Mean	Min.	Max.	SD
Resilience RMS-25	Overall result	42	67.190	13	100	23.600
	Perseverance and proactive approach	42	14.000	1	20	5.217
	Openness to new experiences and sense of humor	42	14.047	2	29	5.355
	Personal coping skills and tolerance of negative emotions	42	13.738	3	20	4.978
	Tolerance of failures and treating life as a challenge	42	13.357	3	20	4.878
	Optimistic attitude to life and the ability to mobilize oneself in difficult situations	42	13.071	3	20	4.749

Signs of depression HADS-M	Overall result	42	21.952	3	35	9.012
	Depression	42	11.095	1	18	4.230
	Anxiety	42	8.476	0	16	4.890
	Aggression	42	2.000	0	6	1.766

Spearman's rank correlation between the resilience scale results and the general HADS-M scale results was conducted in the study group. The results were presented in table 2.

Table 2. **Spearman's rank correlation between the RMS-25 scale results and the HADS-M scale results (overall result)**

Variable	HADS-M	
	Spearman's rho	Statistical significance
RMS-25 (Overall result)	-0.697	p < 005
RMS-25 Perseverance and proactive approach	-0.712	p < 005
RMS-25 Openness to new experiences and sense of humor	-0.678	p < 005
RMS-25 Personal coping skills and tolerance of negative emotions	-0.718	p < 005
RMS-25 Tolerance of failures and treating life as a challenge	-0.656	p < 005
RMS-25 Optimistic attitude to life and the ability to mobilize oneself in difficult situations.	-0.673	p < 005

The results showed crucial statistical negative correlations between the resilience results and the HADS-M scale results. This means that the higher the resilience, the lower the intensification of psychological problems.

In the next stage Spearman's rank correlation between the RMS-25 subscales and the HADS-M subscales was conducted. The results were presented in table 3.

Table 3. **Spearman's rho correlation between the RMS-25 and HADS-M subscales**

Variable	HADS-M (anxiety)	HADS-M (depression)	HADS-M (aggression)
	Spearman's rho	Spearman's rho	Spearman's rho
RMS-25 Perseverance and proactive approach	-0.685*	-0.612*	-0.187
RMS-25 Openness to new experiences and sense of humor	-0.693*	-0.651*	-0.150
RMS-25 Personal coping skills and tolerance of negative emotions	-0.736*	-0.646*	-0.258
RMS-25 Tolerance of failures and treating life as a challenge	-0.686*	-0.654*	-0.155
RMS-25 Optimistic attitude to life and the ability to mobilize oneself in difficult situations.	-0.702*	-0.630*	-0.144

*p < 0.05

A statistically significant negative correlation was found between all resilience subscales and anxiety as well as depression measured by the HADS-M scale. No statistically significant correlations between the resilience subscales and aggression measured with the HADS-M scale were found.

In the next stage of the research, a step-wise multiple regression model was used, where the predicators were: age, number of years of imprisonment, level of resilience and proactive approach (RMS-25), openness to new experiences and sense of humor (RMS-25), personal coping skills and tolerance of negative emotions (RMS-25), tolerance of failures and treating life as a challenge (RMS-25) as well as an optimistic attitude to life and the ability to mobilize oneself in difficult situations (RMS-25), while the dependent variable was the level of anxiety, depression and aggression (HADS-M).

In the case of the anxiety variable – the model proved statistically significant: $F_{(2.39)} = 28.42$; $p < 0.001$. It explained 57.2% of the observed variance of the dependent variable (corrected R-squared = 0.572). Two predicators were introduced to the model.

Table 4. **Results for the predicators – level of personal coping skills and tolerance of negative emotions (RMS-25) as well as the number of years of imprisonment**

Predicator	B coefficient	Beta coefficient	Student's t-test	Statistical significance
Constant	21.960		14.48	< 0.001
Personal coping skills and tolerance of negative emotions (RMS-25)	-0.629	-0.740	7.16	< 0.001
Number of years of imprisonment	-0.768	-0.355	3.43	0.001

The regression analysis showed that the level of personal coping skills and tolerance of negative emotions (RMS-25), as well as the number of years of imprisonment are essential predicators of the dependent variable: level of anxiety (HADS-M). The analysis of the Beta coefficient values informs us that a lower level of personal coping skills and tolerance of negative emotions (RMS-25) as well as a lower number of years of imprisonment allow us to predict a higher level of anxiety (HADS-M).

Based on the B coefficient values, the following regression formula was introduced to the model:

Level of anxiety (HADS-M) = 21.960 – 0.629 * (personal coping skills and tolerance of negative emotions RMS-25) – 0.768 * (number of years of imprisonment)

In the case of the depression variable, the model proved statistically significant: $F_{(1.40)} = 23.201$; $p < 0.001$. It explained 35.1% of the observed variance of the dependent variable (corrected R-squared = 0.351). One predicator was introduced to the model.

Table 5. **Results for the predicator – level of personal coping skills and tolerance of negative emotions (RMS-25)**

Predicator	B coefficient	Beta coefficient	Student's t-test	Statistical significance
Constant	16.653		9.24	< 0.001
Personal coping skills and tolerance of negative emotions (RMS-25)	-0.595	-0.606	4.82	< 0.001

The regression analysis showed that the level of personal coping skills and tolerance of negative emotions (RMS-25) is a crucial predictor of the dependent variable: level of depression (HADS-M). The analysis of the Beta coefficient values informs us that a lower level of personal coping skills and tolerance of negative emotions (RMS-25) allow us to predict a higher level of depression (HADS-M).

Based on the B coefficient values, the following regression formula was introduced to the model:

Level of depression (HADS-M) = 16.653 – 0.595 * (personal coping skills and tolerance of negative emotions RMS-25)

In the case of the aggression variable, the model proved to be statistically significant: $F_{(2.39)} = 5.06$; $p < 0.001$. It explained 16.5% of the observed variance of the dependent variable (corrected R-squared = 0.165). Two predictors were introduced to the model.

Table 6. **Results for the predictors – level of personal coping skills and tolerance of negative emotions (RMS-25) as well as openness to new experiences and sense of humor (RMS-25)**

Predicator	B coefficient	Beta coefficient	Student's t-test	Statistical significance
Constant	3.324		4.47	< 0.001
Personal coping skills and tolerance of negative emotions (RMS-25)	-0.351	-0.990	3.04	0.004
Openness to new experiences and sense of humor (RMS-25)	0.249	0.755	2.32	0.026

The regression analysis showed that the level of personal coping skills and tolerance of negative emotions (RMS-25) as well as openness to new experiences and sense of humor (RMS-25) are essential predictors of the dependent variable: level of aggression (HADS-M). The analysis of the Beta coefficient values informs us that a lower level of personal coping skills and tolerance of negative emotions (RMS-25) as well as a higher level of openness to new experiences and sense of humor (RMS-25) allow us to predict a higher level of aggression (HADS-M).

Based on the B coefficient values, the following regression formula was introduced to the model:

Level of aggression (HADS-M) = 3.324 – 0.351 * (personal coping skills and tolerance of negative emotions RMS-25) + 0.249 * (Openness to new experiences and sense of humor RMS-25)

Discussion

As quoted in the introduction, staying in conditions of solitary confinement is a difficult and traumatic situation, thus, it is recommended to examine the health consequences of incarceration in solitary confinement. Persons who serve sentences of imprisonment suffer from psychological disorders and the probability of committing a suicide by such people is seven times higher than among other members of society [16].

The studies on factors conducive to the health of persons affected by trauma show that the strongest predictor in predicting psychophysical health is optimism and social support [17, 18]. In the examined model both the first element (optimistic attitude to life) and the second element (regarding personal coping skills) constituted components of psychological resilience.

As the conducted analyses show, psychological resilience is a variable that positively correlates with the lack of anxiety and depression disorders, which is consistent with the studies conducted on other social groups, including students [19]. Research shows that resilience closely correlates with positive self-assessment, outlook on the world and future, and it is a strong predicate of positive emotionality of people. The higher the level of resilience, the higher the level of satisfaction and the lower level of depression. Therefore, resilience may be considered a characteristic that determines development of new competences of a person and shapes their outlook on life [20, 21]. As cited in W. Greve and U.M. Staudinger [22], psychological resilience may constitute a constellation of social conditions (among others a possibility of using social support), resources of an individual (e.g. optimism) and the problem-related situation of a person.

There has been little research conducted so far on psychosocial consequences of depriving women of freedom. K. Sitnik [23] claims that the differences in situations of women and men in solitary confinement are unquestionable. This distinctness is, first of all, determined by social factors, among which the dominant social role of women – the role of a mother and wife – is pivotal. H. Machel [24] points out that the relationship between women and their family is very strong and very emotional, which determines their poorer ability to cope with solitary confinement and continuous exposure to stress. Studies of incarcerated women show that their stay in a penitentiary is often associated with a family breakdown, loss of an apartment and intensified demoralization [25].

Accumulation of problems is not conducive to maintaining mental health of incarcerated women. In her research D.M. Boruc [26] showed that in conditions of solitary confinement, they demonstrate a high level of anxiety and depression as well as a higher level of emotional intelligence compared to incarcerated men. The paper by A. Chmielewska-Hampel et al. [27] shows that depression and anxiety negatively correlate

with basic hope – a special conviction of an individual that the world is ordered and sensible as well as favorable to people. The research confirmed the image of psychological health of women incarcerated in penitentiaries that has so far been presented in other studies. The majority of the examined women (69%) suffered from anxiety disorders, whereas 40.4% of them had depression. At the same time higher intensification of the trait – tolerance of negative emotions and personal coping skills determines a better psychological condition.

Health consequences in every stage of imprisonment have special characteristics. The concept described by B. Waligóra and Z. Madej shows that the characteristic emotions associated the first stage of solitary confinement are depression, anxiety and empathy [28]. It may explain the results of this research, which showed that a shorter time of imprisonment was associated with higher level of anxiety.

An interesting area for continuation of research in this scope is the role of stress management strategies adopted by prisoners in predicting the level of psychological resilience of persons staying in conditions of solitary confinement.

Knowledge concerning personal competences, including the role of psychological resilience may help to create conditions which help to reduce negative effects of solitary confinement, contribute to effectiveness of a therapy in the conditions of institutional constraint and prevention of suicidal behavior, which constitutes a problem and challenge for penitentiary medicine.

The limitation resulting from the presented analyses concerns mainly the method of collecting data. Anonymity – required by the Bioethics Committee did not allow for differentiation of the group in terms of therapies or diagnosed addictions. This method of collecting data was optimal for maintaining complete anonymity, however, it also resulted in the collected material not being a random sample, since the questionnaires were completed only by volunteers. Additionally, comparison of research results between women and men allowed to verify the hypothesis in terms of the extent to which psychological resilience is a universal resource in the situation of solitary confinement.

Conclusions

- The results of this research confirm the widely described problem of mental health disorders suffered by incarcerated women. The study demonstrated that the majority of the examined women had anxiety disorders, whereas 40.4% of them suffered from depression.
- The concept of psychological resilience is crucial in analyzing the differences in mental health of incarcerated women. High resilience allows to predict a better mental state, especially in terms of higher intensification of the trait – tolerance of negative emotions and competences of coping.
- In the examined group, an increased level of anxiety was found in women who spent shorter time in solitary confinement, which is consistent with the characteristics of health consequences for this stage of imprisonment.

References

1. Murphy LB. *Further reflections on resilience*. In: Anthony EJ., Cohler BJ. ed. *The invulnerable child*. New York: Guilford Press; 1987. p. 84–105.

2. Rutter M. *Resilience in the face of adversity: Protective factors and resistance to psychiatric disorder*. Br. J. Psychiatry 1985; 147: 598–611.

3. Junik W. *Teoretyczne i empiryczne podstawy wzmacniania rezyliencji (resilience) u dzieci rodzin z problemem alkoholowym*. Dziecko Krzywdz. 2012; 40: 27–45.

4. Szwajca K. *Dyskurs na temat resilience – konteksty i aspekty praktyczne*. Psychoterapia 2014; 168: 99–107.

5. Szwajca K. *Sprężystość (resilience) i odpowiedzi na doświadczenia urazowe – fascynujący i trudny obszar badań*. Psychiatr. Pol. 2014; 48(3): 563–572.

6. Henderson N. *Resiliency at school*. Thousand Oaks, CA: Corvin Press; 1996.

7. Reivich K, Shatte A. *The resilience factor: 7 keys to discovering your inner strength and overcoming life's hurdles*. New York: Broadway Books; 2002.

8. Goffman E. *Charakterystyka instytucji totalnych*. In: Derczyński W, Jasińska-Kania A, Szacki J. ed. *Elementy teorii socjologicznych*. Warszawa: Wydawnictwo Naukowe PWN; 1975. p. 151.

9. Wawrzyniak M, Chmielewska-Hampel A. *Izolacja więzienna jako sytuacja trudna a aleksytymia*. Psychologia Jakości Życia 2009; 8(2): 125–138.

10. Sadowska M, Stępniak P. *Wybrane aspekty zdrowia psychicznego osób skazanych na dwie najsurowsze kary pozbawienia wolności w Polsce – rozważania teoretyczne*. Piel. Pol. 2013; 4(50): 283–288.

11. Warylewski J. *Wymiar sprawiedliwości karnej w Polsce – diagnoza statystyczno-kryminologiczna wybranych aspektów*. In: *Między nauką a praktyką prawa karnego. Księga jubileuszowa profesora Lecha Gardockiego*. Warsaw: C.H. Beck Publishing House; 2014. p. 345–346.

12. Faust E, Magaletta PR. *Factors predicting levels of female inmates' use of psychological services*. Psychol. Serv. 2010; 7(1):1–10.

13. Ogińska-Bulik N, Juczyński Z. *Skala pomiaru prężności – SPP-25*. Now. Psychol. 2008; 3: 39–56.

14. de Walden-Gałuszko K, Majkowicz M. *Ocena jakości opieki paliatywnej w teorii i praktyce*. Gdansk: Medical University; 2000.

15. Krespi Boothby MR, Cases A, Carrington K, Mulholland I, Bolger T. *The accuracy of HADS in detecting emotional distress in male prisoners*. Procedia Soc. Behav. Sci. 2010; 5: 95–98.

16. http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P6-TA-2006-0341+0+DOC+XML+V0//PL [retrieved: 17.07.2016].

17. Segovia F, Moore JL, Linnville SE, Hoyt RE. *Optimism predicts positive health in repatriated prisoners of war*. Psychol. Trauma 2015; 7(3): 222–228.

18. Porębska K. *Wsparcie społeczne w warunkach izolacji jako wyznacznik skutecznej readaptacji*. Probacja 2009; 2: 49–58.

19. Robinson JS, Debakey ME, Larson CL, Cahill SP. *Relations between resilience, positive and negative emotionality, and symptoms of anxiety and depression*. Psychol. Trauma 2014; 6(supl.1): 92–98.

20. Mak WW, Ng IS, Wong CC. *Resilience: enhancing well-being through the positive cognitive triad*. J. Couns. Psychol. 2011; 58 (4): 610–617.

21. Werner EE, Smith RS. *Journeys from childhood to midlife: Risk, resilience, and recovery*. Ithaca, NY: Cornell University Press; 2001.

22. Greve W, Staudinger UM. *Resilience in later adulthood and old age: Resources and potentials for successful aging*. In: Cichetti D, Cohen D. ed. *Developmental psychopathology*. 2nd edition. New York: Wiley; 2006. p. 796–840.

23. Sitnik K. *Odmienności w wykonywaniu kary pozbawienia wolności wobec kobiet w obowiązującym ustawodawstwie polskim*. In: Sadowski M, Szymaniec P. ed. *Prace z zakresu integracji europejskiej oraz nauk penalnych*. Wroclaw: Department of Political and Legal Doctrines, Faculty of Law, Administration and Economics, University of Wroclaw; 2011. p. 293–302.

24. Machel H. *Przestępczość kobiet i wobec kobiet – spojrzenie kryminologiczno-penitencjarne*. Resocjal. Pol. 2014; 8: 13–25.

25. Poklek R. *Instytucjonalne i psychospołeczne aspekty więzienia*. Kalisz: Central Training Centre of Prison Service; 2010.

26. Boruc DM. *Inteligencja emocjonalna u skazanych odbywających karę pozbawienia wolności w zakładach karnych na terenie Polski*. In: Drop E, Maćkiewicz M. ed. *Młoda Psychologia*. Vol. 1. Warsaw: Liberi Libri; 2012. p. 149–172.

27. Chmielewska-Hampel A, Wawrzyniak M. *Depresja, lęk i nadzieja podstawowa u osób odbywających karę więzienia*. Psychologia Jakości Życia 2009; 8(1): 45–58.

28. Ciosek M. *Psychologia sądowa i penitencjarna*. Warszawa: Polish Scientific Publishers PWN; 2001. p. 222–225, 250–251.

Address: Ewa Sygit-Kowalkowska
Institute of Psychology
Kazimierz Wielki University
85-867 Bydgoszcz, Staffa Street 1