

Aggressiveness and the intensity of psychopathic symptoms – gender differences

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Summary

Aim. The analysis of the recent international reports in the literature on psychopathy has proved irrefutably that there is a necessity for the in-depth studies on psychopathy among the female sentenced offenders. Although there is no disagreement among the researchers on the ‘male’ form of this disorder, there are still very few gender comparative studies. The aim of this project was to investigate the relationship between the intensity of particular psychopathic features and aggressive tendencies in a group of female and male inmates.

Methods. 100 incarcerated adult males and 100 incarcerated adult females were studied. To assess the intensity of the psychopathic features the Hare Psychopathy Checklist-Revised (PCL-R; Hare, 2003) was used. Aggressive tendencies were measured using the self-reported Buss–Perry Aggression Questionnaire (AQ; Buss and Perry, 1992).

Results. The analysis of variance showed that 12 out of the 20 PCL-R items differentiate indicators of aggressiveness at statistically significant level in the group of male and female prisoners.

Conclusions. The obtained data suggest that there are gender differences in the manifestation of psychopathy-characteristic features. In both gender groups psychopathic deficiencies can be linked with aggressive behaviors.

Key words: personality disorders, psychopathic symptoms, gender differences

Introduction

Psychopathy has been studied since the 19th century. The current understanding of the disorder has been influenced the most by the works of an American psychiatrist Hervey Cleckley. Despite the growing number of studies on the functioning of individuals with psychopathic characteristics and, in consequence, a big number of publications on the issue, there is currently no “psychopathy” or “psychopathic person-

ality disorder” in any medical classification of mental disorders and illnesses (DSM-5, ICD-10)¹. Even though introducing an antisocial/psychopathic type as a personality disorder was planned at the early stages of work on the currently valid DSM-5 classification, finally it was decided that the original category of antisocial personality disorder would be kept [1]. According to Gierowski and Grabski [2], the description of the antisocial/psychopathic type proposed then was to a large extent consistent with the characteristics of psychopathy according to the R. Hare’s model, especially those constituting the interpersonal-affective factor (Factor 1 of the PCL-R). It should be highlighted that even though the DSM-5 classification eventually does not include a category of “psychopathic personality disorder”, the sole construct of psychopathy (operationalized in Hare’s model and the measuring tool – the PCL-R) has been applied for over two decades in numerous research and has seemed useful in terms of judicial and clinical practice.

A review of the latest publications both on the theory and the studies on psychopathy indicates that the issue of the character of gender differences in terms of symptoms and correlations between various symptoms of this disorder have been gaining prominence in discussions between specialists in both forensic and clinical psychology. The reasons for this definitely include the constantly alive controversies around the diagnosing of the psychopathic personality disorder and the usefulness of the existing diagnostic tools, including the currently most widely used PCL-R [3], outside of the population of incarcerated men. Researchers continuing the tradition of Robert D. Hare and authors of models of psychopathy based on critical analysis of his two-factor (four-element) concept of psychopathy contribute to the ongoing discussion.

The aspect which is most often contested by diagnosticians is the assessment of behavioral and antisocial symptoms described in Factor 2 of the PCL-R (antisocial lifestyle) in the population of incarcerated women [4–6]. It is thought that gender differences in their expression have a significant influence on the rates of prevalence and severity of psychopathy observed in the representatives of both genders. Some researchers [6–9] believe that among women both the observed severity and the prevalence of psychopathy are lower than among men because of the decidedly lower rates of antisocial characteristics in this group. The results for Factor 2 of the PCL-R are lower among women and, as a result, when they are assessed with this tool, their score rarely reaches the 30-points-threshold which indicates psychopathic personality. There have been three types of responses to arguments of this kind among researchers. Supporters of using the PCL-R for the diagnosis

¹ When referring to “psychopathic personality disorders”, the source literature happens to interchangeably use the term “psychopathy”, which is chronologically original in the clinical tradition. The terms “psychopathy”, “psychopathic personality” and “psychopathic personality disorders” are usually treated as synonyms, contrary to the category of “antisocial personality disorder” (DSM-5) or “dissocial personality disorder” (ICD-10) which, according to Hare and others [3], are not direct diagnostic counterparts of psychopathy and cannot be treated as such in view of the clinical specificity of the disorder.

of women have recommended using a lower index for diagnosing PPD in women than the one used by Hare et al. [10]. Others suggested omitting certain manifestations of antisocial behaviors in the diagnostic process and instead recommended focusing on the core of psychopathy, as proposed by authors of the three-factor model, on which the CAPP-IRS is based [5, 11]. It has also been pointed out that some of the observed gender differences (in reference to symptoms such as early behavior problems, juvenile delinquency and criminal versatility) may be more of substantial rather than qualitative nature.

Apart from the above-mentioned questions, there is a substantial body of literature confirming the stability of the so-called core of psychopathy [12] across the genders. It is thought that psychopathic individuals, regardless of their gender, show the same emotional and attention deficits and, while it is only their behavioral manifestations which can take different forms depending on the gender [6, 13]. What is more, as a result of emotional and interpersonal disorders, psychopaths are described as extremely likely to behave in ways diverging from generally accepted norms and to show aggression [14–18]. This seems to be reflected in the high rates of recidivism in the population of psychopathic individuals. Psychopaths begin to engage in criminal acts at a relatively young age and then continue for most of their life, as their aggressiveness does not diminish with age. It is important to note here that, in contrast to classic conceptions, modern researchers report more and more often that the levels of aggression in men and women, also in the general population, are similar, while there are some differences in terms of situational context and forms of aggressive behaviors [19, 20].

Österman et al. [19] observed that girls who are afraid of punishment are much more likely to use indirect aggression (e. g., in form of gossip) than physical attacks on others, and the levels of verbal aggression in boys and girls are usually similar. The authors even suggested that the differences observed in earlier analyses may have been due to lack of suitable norms for the population of women, or concentration on specifically male forms of expression. Similar conclusions can be drawn from analyses of results of studies conducted by Korcz [21] on students or by Buss and Perry [22] on adults not in education. According to Korcz [21], while female students prefer indirect, emotional and hidden forms of aggression, their male colleagues usually employ direct, instrumental and physical aggression. This does not mean physical aggression is unknown to female students – as almost half of female students who took part in the study admitted using it. Buss and Perry [22] in turn observed that in self-description men and women display similar inclination to experience anger, small differences in hostility and moderate differences in their tendency to employ verbal aggression. Only the scores for proclivity for open, physical attack were significantly higher in the group of men than in the group of women.

Material

Based on the available literature on the subject, it was assumed that there is a correlation between the psychopathic structure of personality and the tendency to engage in aggressive behaviors. As some authors of the latest publications doubt the usefulness of the PCL-R (in its entirety or fragments of it) for assessing psychopathy and predicting violence in women [5, 8, 9], a question was put forward of whether there is a relationship between the severity of individual psychopathic features and the levels of aggression in men and women. To answer it, a group of 200 adults serving prison sentences was studied. It consisted of 100 women from several prisons in Poland (Penitentiary in Krakow-Nowa Huta, Detention Centre in Kielce, Penitentiary No. 1 in Grudziadz, and Detention Centre in Warsaw-Grochow) and 100 men serving their sentences in Custody Suite in Kielce and in Detention Centre in Krakow-Podgorze. The mean age of the subjects was 35.59 years ($SD = 10.47$). Subject were accepted for the study based on their written consent to take part.

Method

The study² was conducted in the years 2011–2014 in five different prisons in Poland. Each individual meeting with a subject began with signing a consent to take part in the study and reminding of its basic rules. Then, a diagnostic interview was conducted based on guidelines from the *Interview Guide PCL-R* [3]. After the interview, the Aggression Questionnaire (AQ) by Buss and Perry was completed. In the following stage of the study, information from the prisoner was used in conjunction with the data from observation of his or her behavior during the interview and detailed analysis of personal data to assess the level of psychopathy with the PCL-R.

The Psychopathy Checklist-Revised (PCL-R [3]) measures the levels of psychopathy in terms of 20 basic symptoms (items) of the disorder defined by Hare and grouped in 2 main factors and 4 dimensions/aspects: interpersonal, affective, behavioral, and antisocial. Items 11. (promiscuity) and 17. (many short-term relationships) do not form part of any of the main factors, but are taken into account when assessing the general levels of psychopathic characteristics. The structure of the PCL-R is presented in Table 1.

² The study was conducted as part of the project “Psychopatyczne zaburzenie osobowości oraz ryzyko pojawienia się przemocy na tle różnic międzypłciowych” (“Psychopathic personality disorder and the risk of aggressive behavior – gender differences”) conducted in the Department of Medical Psychology, Chair of Psychiatry, Jagiellonian University Medical College (program number: K/2DS/003897, project manager: prof. dr hab. J.K. Gierowski), and was accepted by the Jagiellonian University Bioethics Committee (KBET/44/B/2013).

Table 1. Structure of the PCL-R

PCL-R (general result)			
Factor 1 of the PCL-R		Factor 2 of the PCL-R	
Interpersonal aspect	Affective aspect	Behavioral aspect	Antisocial aspect
Item 1 – superficial charm	Item 6 – lack of remorse or guilt	Item 3 – need for stimulation and proneness to boredom	Item 10 – poor behavioral control
Item 2 – grandiose sense of self-worth	Item 7 – shallow affect	Item 9 – parasitic lifestyle	Item 12 – early behavior problems
Item 4 – pathological lying	Item 8 – callousness/lack of empathy	Item 13 – lack of realistic, long-term goals	Item 18 – juvenile delinquency
Item 5 – conning/manipulative	Item 16 – failure to accept responsibility for own actions	Item 14 – impulsivity	Item 19 – revocation of conditional release
		Item 15 – irresponsibility	Item 20 – criminal versatility
Item 11 – promiscuous sexual behavior			
Item 17 – many short-term marital relationships			

Source: based on Hare RD. *The Hare Psychopathy Checklist-Revised. 2nd Edition. Manual.* Toronto: Multi-Health Systems; 2003)

The assessment of levels of psychopathy is possible with information obtained during a detailed interview with the assessed person, which should then be complemented with data from analysis of personal files and observation of the person during the interview. The severity of each item is assessed by the person conducting the assessment on a 3-point scale 0–2 (0 – the item does not apply to the patient at all, 1 – moderate level of the given characteristic/behavior, 2 – high level of the given characteristic/behavior).

The Aggression Questionnaire designed by Buss and Perry [22] and adapted by Lucyna Kirwil makes it possible to assess general aggressiveness as a personality trait in an individual, as well as their tendency to employ physical and verbal aggression, experience anger and show hostility (4 sub-scales). It consists of 29 statements describing various aspects of aggressive behavior. The patient's task is to describe themselves with those 29 statements by responding to each of them on a 5-point scale where 1 means “extremely uncharacteristic of me” and 5 – “extremely characteristic of me”.

Results

The statistical analysis of the collected material was performed using the statistical package IBM SPSS Statistics 22 for Windows. Analysis of variance was used to determine which characteristics of psychopathy included in the PCL-R correlate with levels of aggression and the subjects' tendency to use various forms of aggression. Accepted level of significance was $p < 0.05$. It was also checked whether individuals characterized by different scores for each PCL-R items achieved different scores

in the Aggression Questionnaire, both in terms of general results and its elements. Based on the analyses, it was established that for 12 out of 20 PCL-R items there are statistically significant differences in aggression levels between the incarcerated men and women in the study.

Table 2. presents only the statistically significant differences between the two groups.

Table 2. Symptoms of psychopathy which show relationships with aggressiveness in men and women

Analyzed characteristic	Relationships with aggressiveness	
	Women	Men
Need for stimulation (item 3 of the PCL-R)	associated with levels of physical aggression, anger and general aggressiveness (in each of the listed cases, women with high need for stimulation achieved significantly higher scores in the AQ than women without this characteristic and those with moderate levels of need for stimulation, while women without this characteristic achieved significantly lower scores than those with moderate and high levels)	associated with levels of physical aggression and general aggressiveness (men characterized by highest scores for this item achieved significantly higher scores for physical aggression and general aggressiveness than those with no need and moderate need for stimulation. Those who scored 0 for this item, that is, did not show this characteristic, scored lower in the AQ in terms of physical aggression and general scores than those with moderate and high levels of need for stimulation)
Shallow affect (item 7 of the PCL-R)	associated with physical aggression, anger and general aggressiveness (individuals with high scores for this item achieved significantly higher results for the above-mentioned variables than those of moderately shallow affect and those with no deficits in this area)	associated with physical aggression (individuals with high scores for this item achieved significantly higher results for the above-mentioned variables than those of moderately shallow affect and those with no deficits in this area)
Parasitic lifestyle (item 9 of the PCL-R)	associated with levels of physical and verbal aggression, anger and general aggressiveness (female subject with high scores for item 9 of the PCL-R scored higher than those with moderate scores for this item and those who did not lead a parasitic lifestyle)	-

table continued on the next page

Poor behavioral control (item 10 of the PCL-R)	associated with levels of physical and verbal aggression, anger and general aggressiveness (for all of the above-mentioned factors, the subjects with highest scores for item 10 of the PCL-R achieved higher results than women with moderate and good behavioral control)	associated with levels of general aggressiveness (subjects with highest scores for item 10 of the PCL-R achieved higher results than those with moderate and good behavioral control)
Promiscuous sexual behavior (item 11 of the PCL-R)	associated with levels of all forms of aggression apart from verbal aggression (in case of physical aggression and anger, the highest scores were recorded for subjects with moderate levels of promiscuity, and those with highest scores for this item achieved the highest scores for hostility and general aggressiveness)	associated with physical aggression (the highest scores for this item were achieved by subjects with moderate levels of promiscuity)
Early behavior problems (item 12 of the PCL-R)	associated with all forms of aggression and general aggressiveness (higher scores for this item are associated with higher levels of the above-mentioned forms of aggression in women)	associated with physical and verbal aggression (the strongest tendency to employ physical and verbal aggression was found in subjects with a history of serious difficulties in childhood, that is the highest scores for item 12 of the PCL-R)
Lack of realistic, long-term goals (item 13 of the PCL-R)	associated with levels of anger (the highest levels of anger in comparison to other female offenders were observed in those with the highest scores for this item)	associated with the tendency to employ physical aggression, levels of anger and general aggressiveness (the highest levels of anger in comparison to other male offenders were observed in those with the highest scores for this item)
Impulsivity (item 14 of the PCL-R)	associated with levels of physical and verbal aggression, anger and general aggressiveness (the highest levels of anger in comparison to other female offenders were observed in those with the highest scores for this item, and the lowest in women who are not impulsive)	associated with levels of anger (the highest levels of anger were observed in subjects with high levels of impulsivity, and the lowest in those with moderate impulsivity)
Many short-term marital relationships (item 17 of the PCL-R)	associated with levels of all forms of aggression apart from verbal aggression (female offenders to whom this item did not apply achieved significantly lower scores for physical aggression, anger and hostility, as well as overall AQ scores than those with moderate and high scores for this item)	-

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Juvenile delinquency (item 18 of the PCL-R)	associated with all forms of aggression and general aggression levels (the highest mean scores for all forms of aggression and overall AQ scores were observed in women who committed minor offences before they were 17 years old, that is, those with moderate scores for item 18 of the PCL-R. Those who committed crimes as juveniles, that is, those with the highest scores for this item, showed lower levels of general aggressiveness and all its aspects than those with moderate scores for this item, but higher than women with no criminal history before the age of 17)	associated with levels of physical aggression (the highest levels of physical aggression were observed in subjects with highest scores for "juvenile delinquency")
Revocation of conditional release (item 19 of the PCL-R)	associated with physical aggression and general aggressiveness (subjects whose conditional release was revoked when they were adults, that is, those with highest scores for item 19 of the PCL-R, achieved higher scores for physical aggression and higher overall scores in the AQ than those with moderate scores for this item and those who fulfilled the terms of their conditional release)	
Criminal versatility (item 20 of the PCL-R)	associated with levels of physical and verbal aggression, anger, hostility and general aggressiveness (the highest scores for the above-mentioned variables were recorded for subjects with moderate scores for this item, and the lowest by those with highest scores)	associated with levels of physical aggression (the strongest tendency to employ physical aggression was observed in subjects with highest scores for item 20 of the PCL-R)

Discussion

The analysis of the obtained data supports the claim that most (12 out of 20) psychopathic features show correlation between the stronger tendency to employ aggression in interpersonal contacts in the studied sample of male and female offenders. Apart from the few exceptions (poor behavior control in men, promiscuousness in both men and women, early behavior problems in men, impulsivity in men, juvenile delinquency in women, criminal versatility in women), higher scores for each symptom of psychopathy tended to be observed together with stronger tendency to use various forms of aggression. It must be noted that almost all the observed correlations refer to characteristics from Factor 2 of the PCL-R, which constitute the antisocial-behavioral component of psychopathy (need for stimulation, lack of realistic, long-term goals, impulsivity, parasitic lifestyle, poor behavioral control, early behavior problems, juvenile

delinquency, revocation of conditional release, criminal versatility). The symptoms of psychopathy described in Factor 1 of the PCL-R, which form the so-called core of psychopathy, turned out to differentiate the aggressiveness of the subjects to a much smaller extent. Only one of the items (shallow affect) describing affective functioning of persons with psychopathic personality structure correlated with aggression levels.

A discussion of gender differences in manifestations of some features of psychopathic personality should focus on several connections described above. Jackson [12] has suggested a significant role played in female psychopathy by two items treated as less significant in case of men, that is, promiscuity and criminal versatility. The results of studies conducted so far support similar conclusions. Both the tendency to engage in sexual contacts outside relationships and the levels of criminal versatility were more indicative of levels of aggression in women than in men. In female offenders, both those features correlated significantly with the levels of all manifestations of aggressive tendencies (except verbal aggression), while in male offenders they only correlated with the levels of physical aggression. Interestingly, the highest levels of physical aggression and anger, which is an emotional component of aggressiveness, were found in female offenders with moderate levels of promiscuity. The highest levels of hostility and general tendency to employ aggression were found in those female offenders who engaged in sexual intercourse most often.

Those results seem to be in accordance with the characteristic proposed by Hare [3]. According to him, individuals with high levels of promiscuity often try to force their partners to engage in acts they do not accept. It is worth noting here the motivations for this type of behaviors in women. It is thought that promiscuity in women is usually used for manipulation or as a way to ensure the presence of potential partners who are a source of specific material goods [6, 23, 24]. Interesting conclusions can also be drawn from the analysis of aggressiveness in context of criminal versatility in women. Those female offenders who have committed 6 or more different types of crimes (that is those with highest scores for item 20 of the PCL-R) turned out to be the least aggressive. It seems that apart from the characteristics listed earlier by Jackson [12], a significant role in female psychopathy can also be played by: parasitic lifestyle, numerous short-term marital relationships and revocation of conditional release. Of course, what was examined in the present study was the relationship between those characteristics and aggressive behavior, but further analyses may bring potentially interesting results on other behavioral correlates of the above-mentioned characteristics.

Buss and Perry [22] in their concept of aggressiveness pointed to the relationship between impulsivity and all the components of aggressiveness they defined. Contrary to what the authors of the AQ have established, in the studies discussed here a relationship between impulsivity levels and the tendency to employ different forms of aggression (except hostility) exists in the group of female offenders, but in the group of male offenders only the tendency to show anger showed a connection to levels of impulsivity. In this group, the most impulsive subjects turned out to be affectively predisposed for aggression.

Weizmann-Henelius et al. [25] have suggested that juvenile delinquency (item 18 of the PCL-R) should be considered one of the less significant symptoms in diagnosing psychopathy in women because in this group older age at which first offences or crimes are recorded by the police has been noted. Other researchers have associated this fact more with the difficulty in revealing acts of violence committed by women stemming from the situational context (family environment, close relationships) and the severity of bodily harm caused by them, not with lack of such behaviors in underage girls [13, 26]. The obtained results suggest that in the group of female offenders the occurrence and seriousness of offences committed before the age of 17 is associated with the levels of all the considered indicators of aggressiveness (physical aggression, verbal aggression, anger, hostility and general tendency to use aggression). Female offenders who committed minor offences while under age were characterized by the highest levels of aggressive tendencies.

Conclusions

The results of the study of gender differences in terms of levels of aggressiveness in the population of people serving prison sentences support the hypothesis of the relationship between the severity of psychopathic characteristics and the tendency to engage in aggressive behaviors. Individual psychopathic characteristics (especially those describing antisocial behaviors and lifestyle) correlate with the stronger tendencies to employ aggression in interpersonal contacts both in male and female offenders. In light of the results obtained from the study it seems that psychopathy should be treated as a significant personal predictor of interpersonal aggression, and in consequence also a risk factor for criminal behaviors. This relationship proved relatively independent of differences between men and women in the model of psychopathic characteristics, even though psychopathy symptoms in female offenders correlated with all the studied aspects of aggressiveness somewhat more often.

Gender-related differences in the clinical image of psychopathy are significant in predicting aggressive behaviors already at the level of individual symptoms of psychopathy. There was a stronger connection between the tendency to engage in sexual behaviors outside of relationships as well as the level of criminal versatility and levels of aggression in women than men in the studied sample. This result is congruent with the data from previous studies which suggested that different items of the PCL-R scale are more diagnostically useful in case of women than men.

The results of the conducted research project contribute to the ongoing discussion, both among scientists and medical practitioners, on the application of the psychopathy construct as proposed by Hare [3] for the purposes of research and diagnosis. The obtained data suggests that Factor 2 of the PCL-R has a dominant role when it comes to manifesting tendencies for aggressive behaviors by the participants in the study. Therefore, it seems that the behavioral-antisocial indicators of psychopathy contained in Factor 2 of the PCL-R are more useful in predicting the risk of aggressive behavior than affective-interpersonal dimension based on personality traits.

References

1. Nowakowski K. *Inteligencja emocjonalna a kompetencje społeczne osób o psychopatycznej strukturze osobowości*. Krakow: Jesuit University Ignatianum–WAM Publishing House; 2015.
2. Gierowski JK, Grabski B. *Zaburzenia osobowości w opiniowaniu sądowym – perspektywa psychiatryczna i psychologiczna*. *Psychiatria i Psychologia Sądowa*. 2011; 1(3): 4–12.
3. Hare RD. *The Hare Psychopathy Checklist-Revised. 2nd Edition. Manual*. Toronto: Multi-Health Systems; 2003.
4. Kennealy PJ, Hicks BM, Patrick CJ. *Validity of factors of the Psychopathy Checklist-Revised in female prisoners: Discriminant relations with antisocial behavior, substance abuse and personality*. *Assessment*. 2007; 14(4): 323–340.
5. Kreis MKF, Cooke DJ. *Capturing the psychopathic female: Piloting the CAPP-IRS with woman offenders*. Paper presented at 8th annual conference of the International Association for Forensic Mental Health Society, Vienna, Austria; 2008, July.
6. Rogstad JE, Rogers R. *Gender differences in contributions of emotion to psychopathy and antisocial personality disorder*. *Clin. Psychol. Rev.* 2008; 28(8): 1472–1484.
7. Cooke DJ, Michie C. *Refining the construct of psychopathy: Towards a hierarchical model*. *Psychol. Assessment*. 2001; 13(2): 178–188.
8. Jackson RL, Rogers R, Neumann CS, Lambert PL. *Psychopathy in female offenders. An investigation of its underlying dimensions*. *Crim. Justice Behav.* 2002; 29: 692–704.
9. Strand S, Belfrage H. *Gender differences in psychopathy in a Swedish sample*. *Behav. Sci. Law*. 2005; 23: 837–850.
10. Hare RD, Hart SD, Harpur TJ. *Psychopathy and the DSM-IV criteria for antisocial personality disorder*. *J. Abnorm. Psychol.* 1991; 100(3): 391–398.
11. Cooke DJ, Hart SD, Logan C, Michie C. *Comprehensive Assessment of Psychopathic Personality – Institutional Rating Scale (CAPP-IRS)*. Unpublished manuscript; 2004.
12. Jackson RL. *Assessment of psychopathy in incarcerated females*. Thesis (M.S.). University of North Texas; 2001, August.
13. Verona E, Vitale J. *Psychopathy in women: Assessment, manifestations, and etiology*. In: Patrick CJ. ed. *Handbook of psychopathy*. New York: Guilford Press; 2006.
14. Hare RD. *Psychopathy as a risk factor for violence*. *Psychiat. Quart.* 1999; 70(3): 181–197.
15. Douglas KS, Ogloff JR, Nicholls TL. *Assessing the risk for inpatient psychiatric violence*. Paper presented at the Annual Convention of the Canadian Psychological Association, Toronto, Ontario, Canada; 1997, June.
16. Pastwa-Wojciechowska B. *Psychopathy and Gender Differences. From Norm to Pathology*. In: Chybicka A, Kazimierzczak M. ed. *Appreciating diversity-gender and cultural issues*. Krakow: Impuls Publishing House; 2008.
17. Pastwa-Wojciechowska B. *The psychopathic perpetrator of an incest offence – role of sex or gender?* In: Chybicka A, Safdar SF, Kwiatkowska A. ed. *Culture and Gender. Intimate relation*. Gdańsk: GWP; 2010.
18. Pastwa-Wojciechowska B. *Psychologiczno-psychiatryczna problematyka psychopatii a potrzeby i praktyka opiniodawstwa w procesie stosowania prawa*. *Chowanna* 2011; 2(37): 159–178.
19. Österman K, Bjorkqvist K, Lagerspetz KM, Kaukiainen JA, Landau SF, Frączek A et al. *Cross-cultural evidence of female indirect aggression*. *Aggressive Behav.* 1998; 24: 1–8.
20. Cabalski M. *Przemoc stosowana przez kobiety*. Krakow: Impuls Publishing House; 2014.

21. Korcz I. *Agresja – wyzwaniem cywilizacyjnym*. In: Kowalski D, Kwiatkowski M, Zduniak A. ed. *Edukacja dla bezpieczeństwa: wybrane perspektywy*. Lublin: O'CHIKARA; 2004.
22. Buss AH, Perry M. *The Aggression Questionnaire*. *J. Pers. Soc. Psychol.* 1992; 6: 452–459.
23. Forouzan E, Cooke DJ. *Figuring out la femme fatale: Conceptual and assessment issues concerning psychopathy in females*. *Behav. Sci. Law.* 2005; 23: 765–778.
24. Wynn R, Høiseth MH, Pettersen G. *Psychopathy in women: Theoretical and clinical perspectives*. *International Journal of Women's Health* 2012; 4: 257–263.
25. Weizmann-Henelius G, Putkonen H, Grönroos M, Lindberg N, Eronen E, Häkkänen-Nyholm H. *Examination of psychopathy in female homicide offenders – confirmatory factor analysis of the PCL-R*. *Int. J. Law Psychiat.* 2010; 33(3): 177–183.
26. Bjorkqvist K, Osterman K, Kaukiainen A. *The development of direct and indirect aggressive strategies in males and females*. In: Bjorkqvist K, Niemela P. ed. *Of mice and women: Aspects of female aggression* (pp. 51–64). San Diego, CA: Academic Press; 1992.

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