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# The Electronic Supervision System in the Opinion of Convicts in Prisons

**Abstract:** The subject of the study is prisoners' evaluation of the Electronic Supervision System (ESS). The author's Questionnaire for Evaluating the Electronic Supervision System was used as a tool, which also contained a lie scale. The respondents' mood was also controlled. To verify the formulated hypotheses, the method of diagnostic survey was adopted and methods of statistical and comparative analysis. Factor analysis demonstrated that the perception of the Electronic Supervision System does not come down to a unitary opinion – opinions about ESS are an incoherent construct, in which we can single out three factors: Negative Evaluations, Positive Evaluations and Stigmatization. It turned out that "non-elite" prisoners have a much higher intensity of Negative Evaluations of ESS than "elite" prisoners. In terms of Positive Evaluations and sensed Stigmatization, there were no significant differences found between non-elite and elite groups.
**Key words:** Electronic Supervision System, stigmatization, evaluation of Electronic Supervision System.

## Introduction

The search for answers why the penitentiary systems do not meet the expectations invested in them, thus constituting a humiliating experience for prisoners, has absorbed many researchers (Eysenck, Eysenck 1998, p. 59). It has been established beyond any doubt that the prison environment produces a number of situations that are disadvantages to humans (Ciosek, Kmiecik 1987, p. 141; Szaszkiewicz

1997, p. 11). An undisputed source of scientific data on important aspects of human functioning in the prison was started on 14 August 1971 by Philip Zimbardo's prison experiment (Zimbardo 1973, p. 243–256). The experimental prison simulation led Zimbardo to the discovery of perhaps the most important causes of defects of prison, namely the improper structure of authority. In social psychology, authority is an extremely important, but, it needs to be added, neglected variable (Eysenck, Eysenck 1998, p. 68). According to Hans and Michael Eysenck, the staff of prisons do not see and do not reward convicts for proper behavior, yet negative behavior is noticed and punished (Eysenck, Eysenck 1998, p. 68). When considering the social functioning of people (particularly in prison isolation), it is difficult to ignore the findings of behavior theory (Malewski 1975, p. 372–385). It is expected that ignoring the instrumental learning mechanism and the mechanism of classical conditioning will not remain without consequences for the effectiveness of interactions, and may lead to learned helplessness of convicts. Hans and Michael Eysenck, in seeing the causes of the weakness of penitentiary systems indicate three important areas of research: related to persons deprived of their liberty, prison personnel and organizational structure and physical conditions of the prison. On each level there may be events that negatively affect the efficiency of penitentiary interactions (Eysenck, Eysenck 1998, p. 59). Researchers emphasize, however, that effective social rehabilitation is possible. For this to happen, therapy must take into account the personality and categories of offenders, age and their sex (Eysenck, Eysenck 1998, p. 262).

## The idea of the electronic supervision system

The electronic supervision system (hereinafter: ESS) creates other, quite different terms of serving imprisonment. In the case of serving a sentence in ESS there are no problems with prison staff and organizational structure and physical conditions in prison. The negative social influence of demoralized convicts fades. However, other important issues appear, such as the public perception of the new system of imprisonment and psychological costs incurred by persons close to the convict, while from the point of view of the convict – perceived stigmatization and challenges associated with self-control. Since the issue of time is extremely important for convicts (Lewandowski 1975, p. 7 et seq.), the paper formulates research problems related to the variables of time (second and third problem). The reference to the self-division of convicts appearing in literature (taking into account the different groups of prisoners) generated a sixth problem. And considering certain aspects of a convict's position resulted in formulating the first, fourth and fifth problem. Determining research problems will be preceded by basic information on the electronic supervision system.

The concept of using the electronic monitoring for controlling the behavior of people who are of interest to the justice system was introduced into literature by American psychologist Ralph Schwitzgebel (1967). Although the outline of the theoretical use of electronics for controlling the behavior of people was ready in 1964, the first attempts of practical application had to wait until 1983, i.e. the start of the experiment in the state of New Mexico. The eighties in the United States was a time of realizing the first electronic monitoring programmes. In 1987, nearly 1,000 convicts in 21 states participated in such programmes (Sielicki 2005, p. 15). Initially, they were based on ordinary telephone lines. Over time, they began to use GSM mobile telephony. In 1997, active GPS technology was applied in Florida, which dramatically intensified control of the convict's behavior, creating, among others, the ability to program the areas where the presence of the convict was undesirable.

In Europe, first experiments were carried out in 1989 in the UK, although in practice, electronic monitoring of offenders there began in 1999. In Sweden, the new concept became of interest already in 1994, and was introduced permanently in the directory of punitive measures in 1999. In that same year, electronic control of behavior was also introduced in the Netherlands, in 2000 in France, while electronic monitoring was introduced to the Italian legal system by the act of 19 January 2001 (Sielicki 2005, p. 16). Thus it is a new issue in Europe.

Legislators of individual countries refer to the legal issues of electronic monitoring solutions in diverse ways. The basic decision concerns the function which it is intended to serve. It recognizes the opportunity to use monitoring in the criminal trial, when it would fulfill the preventive function (or complement it). Electronic monitoring can be used to control the behavior of convicts during the enforcement of short-term imprisonment (penitentiary application).

The study results presented in the paper and conclusions introduced on the basis of them concern the functioning of the electronic supervision system in Poland's penitentiary reality – one of the systems of serving short-term imprisonment. Therefore, they apply to evaluations generated by applications regulated by the act of 7 September 2007 on the enforcement of imprisonment sentences in the electronic supervision system. According to the intention of the legislator, the penitentiary court may grant permission to the convict to serve their sentence of imprisonment in the ESS in a situation if certain conditions are met:

— the punishment of imprisonment ruled against the convict does not exceed one year and conditions specified in art. 64 § 2 of the act of 6 June 1997 Penal Code do not occur;
— serving sentences in this system ensures the realization of objectives of the punishment;
— the convict has a permanent place of residence;
— adults who live with the convict consented in writing to the penitentiary court imposing on the convict obligation of remaining in the specified place

for the specified time (i.e. obligation set out in art. 8 sec. 1 pt. 1 of the act of 7 September 2007); said consent also applies to the performance of controlling activities by the authorized entity which are set out in art. 8 sec. 1 pt. 5 of the Act of 7 September 2007;
— there are no obstacles in terms of technical and organizational possibilities related to exercising supervision by the entity conducting the monitoring headquarters and authorized supervising entity and housing conditions of the convict (art. 6, sec. 1 of the act of 7 September 2007).

The essence of imprisonment in the electronic supervision system above all consists in controlling the behavior of the convict via electronic apparatus. This control can consist in monitoring the behavior of the convict, and in particular: being in the designated place at the designated time indicated by the penitentiary court, stopping from being in places indicated by the court, not approaching specific persons. The electronic supervision system, mainly due to its newness in Polish penitentiary reality is generating evaluation. The paper is an attempt to identify those evaluations.

## Methodology of own studies

The main objective of the study was to identify how respondents evaluate the electronic supervision system. The research objective decided on the following research problems:
— Is there a link between the age of convicts and evaluation of the electronic supervision system?
— Is there a link between length of stay in conditions of prison isolation and evaluation of the electronic supervision system?
— Is there a link between the time remaining to the end of imprisonment and evaluation of the electronic supervision system?
— Do convicts and people not experiencing prison isolation differ in their evaluations of the electronic supervision system?
— Do convicts fulfilling and not fulfilling formal conditions of serving imprisonment in the electronic supervision system differ in their evaluations of the electronic supervision system?
— Do participants and non-participants in elite subculture differ in their evaluations of the electronic supervision system?

The following independent variables were studied: age, prison isolation time, time remaining until the end of imprisonment, not experiencing prison isolation, fulfilling formal conditions of serving sentence in ESS, membership of a prison elite subculture. The measured dependent variables were: positive evaluations of the electronic supervision system, negative evaluations of the electronic supervision system, and sense of stigmatization.

The following research hypotheses were formulated:

H1. Age of convicts does not differentiate evaluations of ESS.

H2. Prison time does not differentiate evaluations of ESS.

H3. Time remaining until the end of imprisonment differentiates evaluations of ESS.

H4. Convicts and persons not experiencing imprisonment differ in their evaluation of ESS.

H5. Convicts who fulfill and do not fulfill formal conditions of imprisonment in ESS differ in their evaluation of this system.

H6. Convicts participating and not participating in elite subculture differ in their evaluation of ESS.

The study included 260 convicts and 70 people who have never experienced isolation in prison *(N* = 330). Research material contained in 15 questionnaires was rejected (due to the high score on the KŁ scale). The study results of 213 convicted adult men not participating in prison elite subculture and 34 participating in this subculture were used for statistical analysis. Sixty-four percent of the respondents were convicts being for the first time in prison, the remaining ones were repeated convicts (36%). The average age of first-time convicts in the prison was 33 years, while the average age of those residing a repeated time was 37 years. The average time of stay in isolation for the first-time convicts is 14 months, while for the repeated convicts slightly more than 11 months. The average remaining prison time for the first-time convicts is 19 months, while for the repeated convicts slightly more than 17 months.

In the Prison in Pińczów (closed type of facility) convicts were surveyed from the end of December 2013 to the end of July 2014. The study in the Prison in Trzebinia (semi-open type of facility) was held on 27–30 May 2014. From 21 January to 9 June 2014 persons who were not experiencing prison isolation were surveyed *(N* = 70), who came mainly from the urban environment of Pinczów and surrounding areas. Research material contained in the questionnaires of 13 women and 55 men was used for statistical analysis. In the group of men there were 34 retired Prison Service officers (mainly from the Prison in Pinczów and several former officers of Detention Center in Radom and Detention Center in Kielce). The education of the respondents was as follows: secondary – 33 people, tertiary – 35 respondents. The average age of study participants slightly exceed 48 years.

In order to answer the posed research problems and verify the formulated research hypotheses the method of diagnostic survey and the method of statistical-comparative analysis were adopted. Accordingly, the questionnaire technique and interview technique were used for the adopted method. An original Questionnaire for Studying the Evaluation of the Electronic Supervision System was used as a research tool, which consists of 18 statements (negative and positive) associated with the object of evaluation. The respondents take up a stance towards statements

by checking the appropriate number on a 5-point Likert scale. The mood of persons and convicts was controlled on a single-point Likert scale (How are you feeling today?). The survey questionnaire also contains a pool of five positions likened to questions of verification scales with an inventory of personalities, mainly the "Lie" scale (KŁ) with Eysenck's MPI (Choynowski 1968, p. 51–95; Drwal 1981, p. 144–145).

In order to obtain a representative sample for the population of convicts, a random selection of prisoners was used. Participation in the study was voluntary. After obtaining the consent of the convict for the study, they were granted instructions with respect to commenting on the statements contained in the questionnaire. It stressed the need to reflect before answering. The prisoners were informed, that at any stage they can resign from the participation in the study. Since there was no reason to mask the real purpose of the study, there were no hidden motives of research activities. In the case of the Prison in Pińczów, the study was conducted in common rooms of residential wards. In contrast, in the Prison in Trzebinia, the study was conducted in the visiting room. The appropriate quality of contact between the researcher and the surveyed was attempted. The study was completed with a brief conversation with the convict, the aim of which, among others, was to obtain the necessary data for statistical analysis.

## Study results

For 18 questions of the survey questionnaire[1] on evaluations of the ESS, applying factor analysis using the method of principal components, the dimensional construct was determined by exploration. According to Field's recommendation (2013), using a matrix of counter-images, KMO value was determined for individual questions, specifying whether they are consistent enough with other questions so that they can be left in the analysis. Due to the unsatisfactory measurement properties of KMO, the following questions were excluded: *P8. The convict should take care of the transmitter and the monitoring equipment installed in the home* (KMO = 0.649) and *P22. Being under the Electronic Supervision System you must have a positive attitude to the control devices – transmitter* (KMO = 0.566). Other individual KMO values exceeded the acceptable measure of > 0.7, therefore, they were left in the analysis as consistent.

The measure of adequacy of selection for the entire sample (all questions) amounted to the fully acceptable KMO = 0.791, which means a moderate, but acceptable, adequacy of sampling for analysis. Bartlett's test of sphericity

[1] P4, P5, P7, P8, P9, P10, P12, P13, P14, P17, P18, P19, P21, P22, P23, P24, P26, P29.

[chi$^2$ (120) = 1152.32, $p < 0.001$] showed that the correlations between individual dimensions were sufficiently large to carry out the extraction of factors (Bedyńska, Brzezicka 2007).

Both the scree plot and the Kaiser criterion indicated a tripartite solution, explaining a total of 47.53% of the variance. This means that given the approach of exploration for the created tool to measure the evaluations of ESS respondents treated the given responses as ones for three clearly separable dimensions, in a way describing three separate phenomena. For the extraction of factors the Varimax method was used (Field 2013).

The first extracted dimension (factor), called Negative Evaluations, includes questions of a content that testifies to dislike towards this system, or describing this system in terms of problems associated with it, e.g.: *Fulfilling the conditions of electronic supervision requires too much compliance from the convict.* This factor explains 22.88% of the variance. The second factor, called Positive Evaluations, consisting of questions with a positive connotation, describes an approving attitude to ESS, and more specifically expresses willingness to participate in the programme, e.g.: *The electronic supervision system can be a chance for convicts.* This factor explains 14.63% of the variance.

Table 1. Results of factor analysis of data obtained using the Questionnaire for Studying the Evaluation of the Electronic Supervision System ($N$ = 315)

| No. | Questions | Evaluations Negative | Evaluations Positive | Stigmatization |
|---|---|---|---|---|
| P9 | Fulfilling the conditions of electronic supervision requires too much compliance from the convict | 0.84 | 0.04 | 0.07 |
| P19 | Fulfilling the conditions of electronic supervision is connected with too great limitations of behavior of convicts | 0.76 | 0.16 | 0.18 |
| P4 | Serving the sentence of imprisonment in ESS is subject to too many requirements for the convict | 0.71 | 0.11 | 0.15 |
| P17 | The presence of the stationary monitoring device in the home reminds the convict too much that they are serving a sentence | 0.63 | -0.04 | 0.06 |
| P10 | The presence of an employee of an Authorized Supervision Entity near the place of serving sentence (house) is too much control of the convict's behavior | 0.54 | -0.05 | 0.45 |
| P18 | Do you agree with the statement that serving a sentence via ESS is a good solution for convicts | 0.09 | 0.79 | 0.02 |
| P13 | Serving a sentence via the electronic supervision system can save the relationships of convicts with loved ones | 0.02 | 0.65 | 0.13 |

Table continued from previous page

| No. | Questions | Evaluations Negative | Evaluations Positive | Stigmatization |
|---|---|---|---|---|
| P29 | The electronic supervision system should be permanently introduced into the Polish penitentiary system | -0.05 | 0.65 | 0.06 |
| P5 | The electronic supervision system can be a chance for convicts | 0.05 | 0.63 | 0.00 |
| P21 | Serving a sentence via the electronic supervision system has more advantages than disadvantages | 0.30 | 0.55 | 0.08 |
| P24 | Do you agree with the statement: The electronic supervision system is a way for convicts to avoid prison | 0.04 | 0.45 | -0.15 |
| P12 | The convict should be courteous towards employees controlling the serving of the sentence via the electronic supervision system | -0.18 | 0.41 | 0.29 |
| P14 | Receiving visits of employees from the Monitoring Headquarters can be troublesome for convicts | 0.08 | 0.07 | 0.80 |
| P23 | Answering all calls from employees from the Monitoring Headquarters can be troublesome for convicts | 0.14 | 0.10 | 0.77 |
| P7 | Checks performed by an employee of an Authorized Supervision Entity in the hours 22.00–6.00 may pose a problem for the convict | 0.17 | -0.06 | 0.61 |
| P26 | The presence of a transmitter on the wrist may be perceived as stigmatization | 0.11 | 0.05 | 0.59 |
| | Own factor value | 3.66 | 2.34 | 1.61 |
| | % of the explained variance | 22.88 | 14.63 | 10.06 |
| | % cumulated | 22.88 | 37.52 | 47.57 |
| | Cronbach's Alpha | 0.773 | 0.687 | 0.695 |

Method of extracting factors – Main components. Method of rotation – Varimax with Kaiser normalization.

The last factor was called stigmatization, as there were statements found in it describing the feeling of the convict that they are stigmatized by the fact of serving sentence via ESS, e.g.: *The presence of a transmitter on the wrist may be perceived as stigmatization* It explains 10.06% of the variance.

In order to determine the level of accuracy (reliability understood as a feature meaning measurement accuracy) of the questionnaire Cronbach's Alpha[2] statistics were calculated. The reliability of the Negative Evaluations scale consisting of 5 positions: P9, P19, P4, P17, P10 is $\alpha = 0.773$, i.e. the scale is characterized by moderate (acceptable) reliability. In addition, it can be observed that the

[2] Since all the scales for questions in the survey questionnaire were such, the measurement result was an average for the results of individual questions.

removal of any position would not increase the value of $\alpha$ for the whole scale. The reliability of the Positive Evaluations scale consisting of 8 positions: P2, P18, P13, P29, P5, P21, P24, P12 is $\alpha = 0.657$, i.e. the scale is characterized by low reliability. In addition, it can be observed that after removing position P2 the value of statistics $\alpha$ would increase to 0.691, and after removing position P24 the value of statistics $\alpha$ would increase to 0.663 (therefore, the reliability of the scale can be slightly increased). The reliability of the Stigmatization scale consisting of 4 positions: P14, P23, P7, P26 is $\alpha = 0.695$, i.e. the scale is characterized by moderate reliability, and the removal of any position would not increase the value of $\alpha$ for the whole scale.

It is worth noting that the Positive Evaluations towards ESS and Negative Evaluations of this system are not opposite ends of the same scale, but two completely separate measurements. Willingness of a prisoner to take part in the programme or the sense of such a programme being a chance for them is something different from perceiving the psychological threats associated with it. It urned out that these measurements in respondents are not linked.

The calculated descriptive characteristics for the variable Negative Evaluation *(M* = 2.91, *SD* = 0.87) showed that the values fit in the range from 1.00 to 5.00, i.e. the difference was R = 4.00. The variable was characterized by weak differentiation (V = 0.30; *Mdn* = 2.80). To check the normality of the distribution of results the Kolmogorov-Smirnov test was used, which works well for large groups. Statistics and the significance of this test showed that the distribution of data was not consistent with normal distribution *[KS* (315) = 0.09, $p < 0.001$].

Positive Evaluations *(M* = 4.43, *SD* = 0.44) as a result ranged from 2.14 to 5.00 (R = 2.86, V = 0.10; *Mdn* = 4.43). Variable distribution was not consistent with normal distribution *[KS* (315) = 0.13, $p < 0.001$]. Skewness statistics *(Sk* = -1.19) indicated a clear negative-skewness, i.e. the superiority of lower than average values, and kurtosis statistics *(KU* = 2.92) indicated a clear platykurtosis, i.e. a large concentration of results around the mean.

In contrast, for the Stigmatization variable *(M* = 2.84, *SD* = 0.82) values ranged from 1.00 to 5.00 (R = 4.00). The variable was characterized by weak differentiation (V = 0.29; *Mdn* = 2.75). Variable distribution was not consistent with normal distribution *[KS* (315) = 0.11, $p < 0.001$].

In order to verify the relationship between the derived factors, correlation analysis was performed. The nonparametric correlation test of Spearman's *rho* was used, based on ranks whose properties enable a good estimation of correlation coefficients in the case of disturbed variable distributions. The coefficients indicate that with the increase of Negative Evaluations, the measurement of Stigmatization grows moderately *(rs* = 0.359, $p < 0.001$), while the measurement of Positive Evaluations slightly decreases *(rs* = -0.156; $p = 0.006$). With the increase of Positive Evaluations the measurement of Negative Evaluations decreases slightly *(rs* = -0.122; $p = 0.031$).

If convicts perceive negative aspects of the electronic supervision system, they naturally feel a greater stigmatization of people in a situation of serving a sentence via this system and their willingness to serve sentences via ESS decreases (though to a slight extent). Naturally – the perception of Stigmatization is conducive to lower willingness to serve the sentence via ESS.

Table 2. The rank correlation coefficients of Spearman's *rho* between obtained factors

| Variables | Negative Evaluations | Positive Evaluations | Stigmatization |
|---|---|---|---|
| Negative Evaluations | | | |
| Positive Evaluations | -0.156** | | |
| Stigmatization | 0.359** | -0.122* | |

* $p < 0.05$;** $p < 0.01$

In order to verify the hypothesis about the relationship between the mood of respondents and perception of ESS correlation analysis was performed. Mood was tested using an 11-point Likert scale *(How are you feeling today?)*. A nonparametric correlation test of Kendall's *tau-b* was used whose properties work well for ordinal data and scales with small ranges. None of the correlations were statistically significant, and thus it can be concluded that the mood of respondents (frame of mind) did not affect the test results.

Table 3. Correlation coefficients of Kendall's *tau-b* between evaluations of ESS and the self-descriptive measurement of respondents' mood

| Variables | How are you feeling today? |
|---|---|
| Negative Evaluations | -0.049 |
| Positive Evaluations | 0.015 |
| Stigmatization | 0.053 |

* $p < 0.05$;** $p < 0.01$

The questionnaire also contained the lie scale (KŁ). To test the relationship between the number of points obtained on the lie scale and the measurements of the questionnaire, a correlation analysis was performed using the nonparametric correlation test of Kendall's *tau-b*. None of the correlations were statistically significant and thus it can be concluded that there are no relationships between the analyzed variables.

Table 4. Correlation coefficients of Kendall's *tau-b* between the obtained factors and the lie scale of respondents

| Variables | Lie scale |
|---|---|
| Negative Evaluations | 0.046 |
| Positive Evaluations | -0.022 |
| Stigmatization | -0.063 |

* $p < 0.05$;** $p < 0.01$

It was noted that the age of respondents and time of current stay in prison has no relationship with the study results. In contrast, the longer the time until the end of the sentence, the higher the results of Positive Evaluations of the electronic supervision system in respondents ($rs = 0.136$, $p = 0.033$), and the smaller the intensity of Negative Evaluations ($rs = -0.298$, $P < 0.001$) and Stigmatization ($rs = -0.156$; $p = 0.014$).

It was also noted that the more times the respondent has been in prison, the higher the measurement result of Positive Evaluations ($b = 0.122$; $p = 0.019$), and the lower the sense of Stigmatization ($b = -0.112$; $p = 0.030$). However, there was no relationship disclosed between the number of stays in prison and the intensity of Negative Evaluations. The dependencies shown are not particularly strong, but they seem to be significant.

Table 5. Rank coefficients of Spearman's rho between evaluations of ESS and time measurements

| Variables | Age | Time remaining until end of sentence | Length of stay in prison |
|---|---|---|---|
| Negative Evaluations | -0.02 | -0.298** | -0.067 |
| Positive Evaluations | 0.026 | 0.136* | -0.059 |
| Stigmatization | -0.012 | -0.156* | 0.037 |

* $p < 0.05$;** $p < 0.01$

Table 6. Correlation coefficients of Kendall's tau-b for evaluations of ESS and number of stays in prison

| Variables | Number of stays in the prison |
|---|---|
| Negative Evaluations | -0.067 |
| Positive Evaluations | 0.122* |
| Stigmatization | -0.112* |

* $p< 0.05$;** $p< 0.01$

To assess whether there are differences in perceiving the electronic supervision system between convicts and persons from the control group, intergroup analysis was performed where the independent variable was division of respondents into convicts and persons not experiencing prison isolation, and dependent variables were measurements obtained through factor analysis.

The analysis of differences for the factor Negative Evaluations by the Mann-Whitney U nonparametric rank test showed that the differences are statistically significant $U = 3810.00$, $p < 0.001$. Convicts had a more negative evaluation determining their threats towards ESS ($N = 247$; $Mdn = 3.00$) than the control group ($N = 68$; $Mdn = 2.10$).

Convicts ($N = 247$; $Mdn = 3.00$) also had significantly ($U = 6723.50$, $p = 0.011$) higher sense of Stigmatization than the control group ($N = 68$; $Mdn = 2.50$).

There were no differences between convicts and the control group in terms of Positive Evaluations of ESS ($U = 8312.50$, $p = 0.897$).

Table 7. Differences in ESS evaluations between convicts and the control group

| Variables | Convicts (N = 247) | | Control group (N = 68) | | U | *p* |
|---|---|---|---|---|---|---|
| | Mdn | Mrang | Mdn | Mrang | | |
| Negative Evaluations | 3.00 | 176.57 | 2.10 | 90.53 | 3810.00 | 0.000** |
| Positive Evaluations | 4.43 | 158.35 | 4.57 | 156.74 | 8312.50 | 0.897 |
| Stigmatization | 3.00 | 164.78 | 2.50 | 133.38 | 6723.50 | 0.011* |

* $p < 0.05$;** $p < 0.01$

To assess whether there are differences in perceiving the electronic supervision system between convicts fulfilling formal conditions for serving sentences via ESS and convicts not fulfilling these conditions, another intergroup analysis was performed.

It turned out that convicts fulfilling the formal conditions of serving sentences via ESS ($N = 102$; $Mdn = 3.30$) have a significantly higher ($U = 5416.50$, $p < 0.001$) Negative Evaluation than convicts not fulfilling formal conditions of serving sentences via ESS ($N = 145$; $Mdn = 3.00$). Those fulfilling the formal conditions ($N = 102$; $Mdn = 3.00$) also sense significantly higher ($U = 6104.00$, $p = 0.019$) Stigmatization that those not fulfilling formal conditions of serving sentences via ESS ($N = 145$; $Mdn = 2.75$). In addition, those fulfilling the formal conditions ($N = 102$; $Mdn = 4.43$) have a significant ($U = 6289.50$, $p = 0.044$) lower Positive Evaluation than those not fulfilling these conditions ($N = 145$; $Mdn = 4.57$).

Table 8. ESS evaluations and fulfilling conditions for serving sentences via ESS

| Variables | Fulfills the conditions of ESS (N = 102) | | Does not fulfill the conditions of ESS (N = 145) | | U | *p* |
|---|---|---|---|---|---|---|
| | Mdn | Mrang | Mdn | Mrang | | |
| Negative Evaluations | 3.30 | 143.40 | 3.00 | 110.36 | 5416.50 | 0.000** |
| Positive Evaluations | 4.43 | 113.16 | 4.57 | 131.62 | 6289.50 | 0.044* |
| Stigmatization | 3.00 | 136.66 | 2.75 | 115.10 | 6104.00 | 0.019* |

* $p < 0.05$;** $p < 0.01$

It is worth noting that the convicts who declared that they have knowledge about the electronic supervision system significantly better perceive the system than convicts who do not have this knowledge. Negative Evaluations (sense of insecurity) in both groups are the same ($U = 2097.50$, $p = 0.261$), like for the sense of Stigmatization ($U = 2287.00$, $p = 0.599$), but convicts who have knowledge about ESS ($N = 223$; $Mdn = 4.57$) show a significant ($U = 1778.00$, $p = 0.032$) higher Positive Evaluation than convicts who do not have this knowledge ($N = 22$; $Mdn = 4.14$).

Table 9. ESS evaluation and knowledge of respondents about ESS

| Variables | Has knowledge (N = 223) | | Doesn't have knowledge (N = 22) | | U | *p* |
|---|---|---|---|---|---|---|
| | Mdn | Mrang | Mdn | Mrang | | |
| Negative Evaluations | 3.00 | 121.41 | 3.20 | 139.16 | 2097.50 | 0.261 |
| Positive Evaluations | 4.57 | 126.03 | 4.14 | 92.32 | 1778.00 | 0.032* |
| Stigmatization | 3.00 | 122.26 | 3.00 | 130.55 | 2287.00 | 0.599 |

* $p < 0.05$;** $p < 0.01$

Taking into account self-division of prison communities into prison elite and non-elite groups enables to note that there are no differences between these groups in Positive Evaluations of ESS ($U = 3297.00$, $p = 0.399$), or sensed Stigmatization ($U = 3521.00$, $p = 0.795$). In contrast, a difference was observed in Negative Evaluations of ESS ($U = 2281.00$, $p = 0.001$). Non-elite prisoners ($N = 213$; $Mdn = 3.20$) have a significantly higher intensity of Negative Evaluations than convicts participating in a prison elite subculture ($N = 34$; $Mdn = 2.70$), which is surprising.

Table 10. ESS evaluation and participation of respondents in the structures of a second life of prison

| Variables | Non-elite (N = 213) | | Elite (N = 34) | | U | *p* |
|---|---|---|---|---|---|---|
| | Mdn | Mrang | Mdn | Mrang | | |
| Negative Evaluations | 3.20 | 130.29 | 2.70 | 84.59 | 2281.00 | 0.001** |
| Positive Evaluations | 4.43 | 122.48 | 4.57 | 133.53 | 3297.00 | 0.399 |
| Stigmatization | 3.00 | 123.53 | 3.00 | 126.94 | 3521.00 | 0.795 |

* $p < 0.05$;** $p < 0.01$

## Discussion

In expressing their optimism regarding the possibility of social rehabilitation of offenders, H. and M. Eysenck strongly emphasize the need to conduct many studies in this area (Eysenck, Eysenck 1998, p. 262). This paper is an account of the study of evaluations of a completely new proposition of interactions on the convict – electronic monitoring. To arouse willingness to cooperate and commitment, the system of interactions should be accepted by the person for whom it is to be applied. Penitentiary systems should also meet the expectations of society, which has the right to formulate them, at least in terms of its effectiveness. In this approach, the recognition of evaluations of electronic monitoring – especially since this is an innovative solution – can go beyond the cognitive character. Analysis of the study results showed that the perception of the electronic supervision system is not reduced to a single position. Evaluation of ESS is an inconsistent construct in which three factors can be distinguished: Negative Evaluations, Positive Evaluations and Stigmatization. Assuming that serving the sentence of imprisonment via ESS allows to avoid the degrading experience of imprisoning people, who do not necessarily have to serve their sentence in prisons, particularly convicts who do not participate in prison elite subculture should be directed to ESS. The negative attitude of prison elite individuals towards penitentiary interactions may lead to such a conclusion (Nowacki 2010, p. 46–48, 51–53; Szaszkiewicz 1997, p. 45––51). Analysis of the data seems to stimulate reflection on narrowing this subgroup to convicts with a distant date of the end of the sentence (within the limits established by the legislator). The high intensity of Negative Evaluations towards the electronic supervision system of non-elite individuals seems to indicate a need to introduce to them the procedure of serving sentences in a way that is directed at reducing tendencies to negatively perceive certain aspects of the electronic supervision system. The data presented in the paper might suggest that the proper addressee of ESS are convicts participating in prison elite subculture – after all

they show fewer negative evaluations of this system. However, this is the wrong conclusion. Conducting studies with a larger number of participants, in particular prison elites, would better explain the revealed dependencies. Since convicts and people not experiencing prison isolation perceive electronic monitoring from completely different perspectives, a difference in evaluating this system has been marked. Therefore, the higher sense of Stigmatization of convicts and their significantly higher Negative Evaluation of ESS is not surprising. The compared groups, however, did not differ in terms of Positive Evaluations of this system. The lack of differences between the groups in terms of Positive Evaluations can positively testify to this system proposal.

## Literature


[1] Bedyńska S., Brzezicka A., 2007, *Statystyczny drogowskaz,* Wydawnictwo SWPS ACADEMIKA, Warsaw.

[2] Bedyńska S., Książek M., 2012, *Praktyczny przewodnik wykorzystania modeli regresji oraz równań strukturalnych*, Akademickie Sedno, Warsaw.

[3] Choynowski M., 1968, *Opracowanie polskiej adaptacji „Inwentarza osobowości"* H.J. Eysencka (Maudsley Personality Inventory), „Biuletyn Psychometryczny"*,* no. 2.

[4] Ciosek M., Kmiecik K., 1987, *Psychologia kliniczna*, *wprowadzenie do psychologii sądowo penitencjarnej*, Uniwersytet Gdański, Gdańsk.

[5] Drwal R.Ł., 1981, *Osobowość wychowanków zakładów poprawczych*, Ossolineum, Wrocław.

[6] Eysenck H., Eysenck M., 1998, *Podpatrywanie umysłu. Dlaczego ludzie zachowują się tak, jak się zachowują*, Gdańskie Wydawnictwo Psychologiczne, Gdańsk.

[7] Field A., 2013, *Discovering Statistics Using IBM SPSS Statistics*, SAGE, London.

[8] Lewandowski M., 1975, *Pęknięcie ziemi*, Czytelnik, Warsaw.

[9] Malewski A., 1975, *O nowy kształt nauk społecznych. Pisma zebrane*, PWN, Warsaw.

[10] Nowacki Z., 2010, *Wywieranie wpływu społecznego w warunkach izolacji więziennej*, Oficyna Wydawnicza „Impuls", Kraków.

[11] Schweitzgebel R., 1967, *Electronic Innovation in the Behavioral Sciences: A Call Toresponsibility*, „American Psychologist", no. 22.

[12] Sielicki D., 2005, *Elektroniczne monitorowanie przestępców – nowoczesna alternatywa pozbawienia wolności*, „Przegląd Więziennictwa Polskiego", no. 47–48.

[13] Szaszkiewicz M., 1997, *Tajemnice grypserki*, Wydawnictwo Instytutu Ekspertyz Sądowych, Kraków.

[14] Zimbardo P.G., 1973, *On the Ethics of Intervention in Human Psychological Research: with Special Reference to the Stanford Prison Experiment*, „Cognition", no. 2.


## List of legal acts


[15] Ordinance of the Minister of Justice of 27 February 2009 on the detailed technical specifications of devices within the technical means of electronic surveillance, and

method on organizing these devices in a system and method of transmitting data inside this system (Journal of Laws 2009 No. 45, item 369).
[16] Act of 6 June 1997 Executive Penal Code (Journal of Laws 1997 No. 90, item 557, as amended).
[17] Act of 7 September 2007 on the enforcement of sentences of imprisonment outside the prison through electronic surveillance, original text: Journal of Laws 2007 No. 191, item 1366; i.e.: Journal of Laws 2008 No. 172, item 1069; i.e.: Journal of Laws 2010 No. 142, item 960.