




# Young's early maladaptive schemas versus psychopathic traits in a non-clinical population

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## Abstract

**Purpose:** There is now evidence that certain psychopathic personality components have their roots in a dysfunctional family of origin. Looking at this phenomenon from the perspective of Jeffrey E. Young's theory, we can surmise that the early negative experiences of people with psychopathic personality traits may have influenced the formation of specific maladaptive schemas. The purpose of this study is to examine the relationship between Young's early maladaptive schemas and psychopathic personality traits in a non-clinical population.

**Methods:** The study involved 150 individuals aged 18 to 45. Eighty-six percent of the study group were women. The Psychopathic Personality Traits Scale – Revised (PPTS-R) and the Triarchic Psychopathy Measure (TriPM), designed to test the intensity of psychopathic traits in the study group, were used. Young's Schema Questionnaire (YSQ-S3-PL) was applied to measure Young's early maladaptive schemas.

**Results:** Statistical analyses revealed significant positive correlations between the severity of psychopathy as measured by the TriPM and the following schemas: Emotional Deprivation, Mistrust/Abuse, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, and Approval Seeking/Recognition Seeking. For the PPTS-R scale, positive correlations were found for thirteen of the eighteen schemas. The strongest correlations across questionnaires were found for the Entitlement/Grandiosity schema. The domain of early maladaptive schemas most strongly associated with psychopathy was Impaired Limits.

**Conclusions:** The Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Mistrust/Abuse, and Emotional Deprivation schemas are all associated with psychopathic personality traits. The strongest correlations are in the Entitlement/Grandiosity schema. The domain of early maladaptive schemas most strongly associated with psychopathy is the Impaired Limits domain.

**Key words:** psychopathy, PPTS-R, TriPM, early maladaptive schemas.

## INTRODUCTION

The definition of psychopathy in the medical sense comes down to an analysis of existing classifications. Assuming that we identify psychopathy with the antisocial personality disorder described in the DSM-5, we can estimate that between 1 and 4% of the general population are individuals who exhibit psychopathic traits [1]. The disorder is diagnosed much more often in men than in women (3 : 1 ratio) [2, 3].

According to Hervey M. Cleckley – the pioneer of psychopathy research – this personality type is mainly characterized by superficial charm, above-average intelligence, and a deficit in anxiety [4]. However, Cleckley's definition does not exclude the characteristics mentioned in current

medical classifications, such as irresponsibility and disregard for the law, lack of guilt, low levels of empathy, low frustration tolerance and aggression control, inability to form close and lasting relationships, rationalization of harm inflicted, and inability to learn from punishment [5].

The traits highlighted by Cleckley provide a basis for discussing whether psychopathy should be considered merely as a disorder. They point to the possibility that psychopathic personality traits may be present in people who are socially considered to be healthy and have no criminal history or problems with the law. Research shows that if we accept rationality, superficial charm, and a deficit of anxiety as part of the definition of a psychopath, we can find people with this personality trait in top management positions across organizations all over the world [6].

At this point, it is important to make a clear distinction between psychopathy, as a broader concept with fuzzy boundaries, and antisocial personality disorder, the criteria for which can be found in the aforementioned classification of disorders, among others. The medical model favors a taxonomic approach, while the psychological model emphasizes the psychopathology of human adaptation and mental regulation mechanisms [7]. The medical model has sometimes been criticized, mainly due to the excessive focus of disorder classification on behavioral criteria to the exclusion of personality (interpersonal and affective) traits [8].

One of the best-known researchers of the phenomenon of psychopathy is Robert D. Hare [9, 10]. Psychopathy as defined by Hare is a construct consisting of two factors. The first (affective/interpersonal), which is invariable throughout an individual's life, includes charisma, superficial charm, exaggeratedly high self-esteem, constant need for stimulation, manipulative tendencies, lack of guilt, and lack of capacity for empathy. The second (lifestyle/antisocial) factor weakens with age and is expressed in impulsiveness, violent behavior, inability to set and achieve goals, irresponsibility, and a tendency to criminal behavior [11, 12]. Williams *et al.* [13] argued that factor 1 corresponds with the classic depiction of psychopathy, whereas factor 2 is more closely related with the measures of criminal behavior and antisocial personality disorder.

For a long time the dominant approach in the literature presented psychopathy in the context of the phenomenon of crime, but now we find numerous studies indicating the occurrence of this personality type in the non-criminal population [14, 15]. The utility of traditional methods of measuring psychopathy (clinical diagnostic procedures and methods based on the classic Psychopathy Checklist, PCL) in general population studies is limited due to the strong focus of these tools on criminal lifestyles [16]. Patrick *et al.* [17] presented a triarchic concept that describes psychopathy as a configuration of three constructs, i.e., disinhibition, boldness, and meanness. According to the authors of the concept, previous accounts of psychopathy focus on either cruelty, violence and emotional coldness or on impulsiveness and social dominance, while underestimating the adaptive aspects of psychopathy (resilience to stress, confidence in social relationships, ease of adaptation to new situations) [8].

Hare's theory is also criticized by Boduszek *et al.* [18]. In Boduszek's view, criminal/antisocial tendencies are merely a consequence of psychopathic traits, and are not themselves an integral part of the disorder [19, 20]. Boduszek *et al.* created the Psychopathic Personality Traits Model (PPTM), in which they emphasize the difference between personality deviation and social deviation [21].

The theory of early maladaptive schemas (EMS) developed by Young seems to comprehensively explain the me-

chanism and, above all, the dynamics of mental disorders arising from early childhood experiences [22]. According to the assumptions of EMS, the experiences we have from the earliest developmental stages shape relatively permanent patterns of feeling and beliefs about ourselves, other people and the world around us. These patterns are called schemas. The primary source of dysfunctional schemas is the unmet or inadequate satisfaction of one (or more) of the child's basic developmental needs (so-called core needs) [23]. Failure to meet these needs brings difficult emotions for the child, such as anxiety, anger, shame or guilt. In an effort to avoid experiencing them, individuals undertake a variety of behavioral and coping strategies that, while reducing tension, also contribute to the perpetuation of the schemas [24].

It is now suggested that certain components of psychopathic personality are derived from dysfunction in the family of origin [25, 26]. There are links between the experience of early childhood trauma and neglect and the presence of psychopathic personality traits [27, 28]. Looking at this phenomenon from the perspective of Young's theory, we can speculate that the early negative experiences of people with psychopathic personality traits may have influenced the formation of maladaptive schemas [23, 29]. A small number of previous studies have shown a clear correlation of psychopathic personality traits with the Entitlement/Grandiosity schema, which belongs to the domain of Impaired Limits [30]. A correlation was also found between primary psychopathy and seven of the 17 schemas examined. The strongest correlations were found with the following schemas: Entitlement/Grandiosity; Punitiveness; Mistrust/Abuse; Emotional Deprivation; and Approval-Seeking/Recognition-Seeking. In contrast, secondary psychopathy was correlated with most early maladaptive schemas, with the strongest associations with Insufficient Self-Control and/or Self-Discipline; Dependence/Incompetence; Abandonment/Instability; and Vulnerability to Harm or Illness. None of these types of phenomena were associated with the Self-Sacrifice schema [31].

### Aim of the research

The growing popularity of schema therapy provides a new framework for understanding the phenomenon of psychopathy [22, 32]. Awareness of the links between childhood experiences and the development of a psychopathic personality trait allows us to hypothesize about the role of early maladaptive schemas in the functioning of individuals with psychopathic personality traits [33, 34].

The purpose of this study was to examine the relationship between Young's early maladaptive schemas and psychopathic personality traits in a non-clinical population.

## MATERIAL AND METHODS

### Material

The study involved 150 people between aged 18 to 45. Eighty-six percent of the study group were women. The majority of the group came from cities with populations over 50,000. Higher education (55.3%) and secondary education (42%) predominate among the respondents. Table 1 shows the socio-demographic characteristics of the study group.

### Methods

In the first part of the study, the participants completed a short questionnaire that was designed to collect socio-demographic data. The respondents then completed the following questionnaires:

#### *Psychopathic Personality Traits Scale – Revised (PPTS-R)*

The Psychopathic Personality Traits Scale – Revised (PPTS-R) was used to assess the intensity of psychopathic personality traits. It consists of 28 statements. The respondent answers on a five-point scale where 0 means “strongly disagree” and 4 means “strongly agree”. Raw scores range from 0 to 112 points [14]. A high total score indicates a significant increase in psychopathic traits. This scale also allows us to determine the severity of individual components of the psychopathic personality trait, such as affective responsiveness, cognitive responsiveness, interpersonal manipulation, and egocentricity [14].

#### *Triarchic Psychopathy Measure (TriPM)*

In order to obtain an accurate description of the psychopathic personality trait, it was decided to use the

Polish adaptation of the Triarchic Psychopathy Measure (TriPM) [8, 35, 36]. The questionnaire consists of 41 items. The respondent answers on a four-point scale, where 0 is false and 3 is true. Raw scores range from 0 to 123 points. The questionnaire has good accuracy and reliability [8]. The TriPM measures psychopathy as a combination of three distinct phenotypic constructs: boldness, meanness, and disinhibition. The TriPM score describes the respondent using the intensity of the described constructs and a summary score that indicates the overall severity of the psychopathic traits (the higher the summary score, the more severe the psychopathic traits) [8].

#### *Young Schema Questionnaire (YSQ-S3-PL)*

The Young Schema Questionnaire (YSQ-S3-PL) in the Polish adaptation by Oettingen *et al.* was used to assess the intensity of early maladaptive schemas [37]. It examines the severity of the 18 schemas described in Young's theory. The reliability index of the questionnaire was found to be satisfactory. The YSQ-S3-PL provides good theoretical accuracy [37].

When analyzing the results of the YSQ-S3-PL questionnaire, a division into five schema domains selected by the author was used, i.e., Disconnection/Rejection, Impaired Autonomy and Performance, Impaired Limits, Other-Directedness, Overvigilance/Inhibition [37].

### Test procedure

The survey was conducted between January and March 2022. Due to the epidemiological situation (restrictions caused by the COVID-19 pandemic), the research was conducted completely anonymously and online using a Google form. Respondents (adults only) were enrolled using the “snowball” method. The questionnaire

**Table 1.** Socio-demographic characteristics of the study group

Factor	Total (N = 150)	Men (n = 21)	Women (n = 129)
Education, n (%)			
Middle school	1 (0.7)	1 (0.7)	0 (0)
Vocational	3 (2.0)	3 (2.0)	0 (0)
Secondary school	63 (42.0)	9 (6.0)	54 (36.0)
Higher	83 (55.3)	8 (5.3)	75 (50.0)
Place of residence, n (%)			
Rural area	19 (12.7)	2 (1.3)	17 (11.3)
Town of up to 50,000 residents	34 (22.7)	4 (2.7)	30 (20.0)
City of 50,000 to 150,000 residents	18 (12.0)	1 (0.7)	17 (11.3)
City of 150,000 to 500,000 residents	36 (24.0)	7 (4.7)	29 (19.3)
City of more than 500,000 residents	43 (28.7)	7 (4.7)	36 (24.0)
Age (years)			
18-26	72 (48.0)	11 (7.3)	61 (40.7)
27-35	41 (27.3)	4 (2.7)	37 (24.7)
≥ 36	37 (24.7)	6 (4.0)	31 (20.7)

was made available through the Facebook platform on a private profile, the University of Lodz group and other groups with public access.

The respondents filled in the questionnaires after learning the purpose of the survey in advance. This goal was partially masked in order to eliminate the dissimulation effect. It was presented to the participants in the following form: “Young’s early maladaptive schemas and their relationship to personality traits in a non-clinical population”.

The research procedure was conducted in accordance with the World Medical Association’s Declaration of Helsinki [38] and the ethical codes of the Belmont Report [39].

Participation in the study was voluntary, and participants were recruited after giving written informed consent. The study was approved by the Bioethics Committee of the Medical University of Lodz No. RNN/136/17/KE and RNN/37/22/KE.

### Statistical analysis

Statistical analysis was performed using IBM SPSS Statistics 27. The study began with the calculation of basic descriptive statistics. The Shapiro-Wilk test was performed to assess the normality of the distribution of the variables under study. The test results were statistically significant. The distributions of the study variables deviate from the normal distribution; therefore, it was decided to use non-parametric test equivalents in the subsequent part of the statistical analysis. Spearman’s rho coefficient was calculated to determine the existence, strength, and direction of the relationship between the intensity of psychopathic traits (as measured by the TriPM and PPTS-R) and the strength of each of Young’s eighteen schemas. The significance level used was  $\alpha = 0.05$ .

## RESULTS

The results recorded in the PPTS, TriPM and the YSQ-S3-PL questionnaire in the study group are presented in Table 2.

### Associations of early maladaptive schemas with the severity of psychopathy trait in the study group

The analysis revealed statistically significant and positive correlations between the severity of psychopathy as measured by the TriPM and the following schemas: Emotional Deprivation, Mistrust/Abuse, Entitlement/Grandiosity, Insufficient Self-Control and/or Self-Discipline, and Approval-Seeking/Recognition-Seeking. The strongest relationship occurred for the Entitlement/Grandiosity schema (0.412\*\*). The analysis also revealed positive associations of psychopathy as measured by the PPTS-R

with thirteen of the eighteen schemas. The most strongly correlated schema was Entitlement/Grandiosity, with a strength of association of 0.596\*\*. Also of note are the moderately strong correlations between psychopathy and Emotional Inhibition (0.457\*\*) as well as Approval-Seeking/Recognition-Seeking (0.395\*\*). A detailed description of the relationships listed is provided in Table 3.

### Associations of psychopathic personality traits with domains of early maladaptive schemas

Analysis revealed a statistically significant relationship between the intensity of psychopathic traits on the TriPM and the Impaired Limits domain. Spearman’s rank correlation coefficient analysis indicated that each domain was significantly correlated with psychopathy as measured by the PPTS-R. The relationships are shown in Table 4.

The next step of the analysis examined whether gender and age affected the results. There were no differences between male and female respondents in the individual scales and the YSQ-S3-PL total score. In the case of TriPM, statistically significant differences were recorded for the meanness subscale ( $t = -2.554, p = 0.011$ ) and the total score ( $t = -2.126, p = 0.035$ ). For the PPTS-R, statistically significant differences were found for two subscales, namely affective responsiveness ( $t = -2.235, p = 0.026$ ) and cognitive responsiveness ( $t = -2.114, p = 0.036$ ).

In the analyses conducted for the age, people who were 18-26 and 27-35 years of age were combined and a group of ‘young adults’ was thus formed. A comparison of this group with the people over 36 years of age showed no statistically significant differences in the tests performed.

## DISCUSSION

Making contact with other people and forming bonds is one of the most important developmental tasks of every human being. We establish our first relationships as children within the immediate family. For each person, this initial relationship becomes the prototype and reference point for all subsequent relationships and relationship behavior [40, 41]. The concept of cognitive schema refers to any general principle that gives meaning to life experiences and organizes them. Although largely formed in childhood, schemas continue to be expanded and used to interpret life experiences in adulthood [42]. Young noted that some of the schemas formed in childhood could be the foundation of many chronic clinical syndromes and less serious personality problems, as well as personality disorders. In his theory, he identified a set of 18 early childhood and detrimental emotional-cognitive schemas that are repeated by the individual throughout life, which he called early maladaptive schemas [22].

Young's early maladaptive schemas versus psychopathic traits in a non-clinical population

**Table 2.** Results recorded in the Psychopathic Personality Traits Scale – Revised (PPTS-R), Triarchic Psychopathy Measure (TriPM) and the Young Schema Questionnaire (YSQ-S3-PL) questionnaire in the study group (N = 150)

	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
<b>PPTS-R</b>				
Total	34.31	20.389	0	89
Affective responsiveness	5.73	6.075	0	25
Cognitive responsiveness	6.26	4.831	0	24
Interpersonal manipulation	12.95	7.648	0	28
Egocentricity	9.4	6.231	0	28
<b>TriPM</b>				
Total	41.93	17.478	0	96
Boldness	22.17	9.526	0	42
Disinhibition	12.58	8.959	0	42
Meanness	7.19	6.581	0	25
<b>YSQ-S3-PL Schema intensification</b>				
Total	266.99	76.817	68	487
I. Disconnection/Rejection	74.10	29.12	21	149
Emotional Deprivation	13.20	7.535	4	30
Abandonment/Instability	17.11	6.844	5	30
Mistrust/Abuse	15.80	6.667	4	30
Social Isolation/Alienation	15.87	7.126	3	30
Defectiveness/Shame	12.11	7.531	4	30
II. Impaired Autonomy and Performance	49.39	19.176	15	105
Failure	13.68	7.416	4	30
Dependence/Incompetence	11.65	5.640	3	30
Vulnerability to Harm or Illness	13.91	6.286	4	30
Enmeshment/Undeveloped Self	10.15	5.231	4	30
III. Impaired Limits	31.54	8.739	6	52
Entitlement/Grandiosity	15.28	5.274	4	30
Insufficient Self-Control and/or Self-Discipline	16.26	5.660	2	30
IV. Other-Directedness	48.436	13.224	11	85
Subjugation	12.50	6.093	4	29
Self-Sacrifice	17.59	6.021	4	30
Approval-Seeking/Recognition-Seeking	18.34	6.412	2	30
V. Overvigilance/Inhibition	63.516	20.043	12	114
Unrelenting Standards/Hypercriticalness	17.76	6.226	2	30
Emotional Inhibition	14.28	6.744	4	30
Negativity/Pessimism	17.61	6.901	2	30
Punitiveness	13.87	5.895	2	30

The results of the few studies conducted among populations of people with psychopathic personality traits show a strong and positive relationship between psychopathy and the Entitlement/Grandiosity schema [32, 43]. According to Maçık [30], this is the only schema associated with psychopathic personality traits in a non-clinical population. The researcher ruled out the presence of other maladaptive schemas and outlined Entitlement/Grandiosity and the Impaired Limits domain as entral to psychopathy. Torres [31] also identified it as a schema of dominant importance in the formation of the personality trait under study.

The results we obtained confirm the theses of other authors who have studied this phenomenon. The Entitlement/Grandiosity schema is most strongly associated with psychopathy. Table 3 shows the scale of dependencies and indicates the dominance of Entitlement/Grandiosity over the strength of relationships with other schemas. The study also confirmed the relationship between psychopathy and the Impaired Limits domain, which includes the Entitlement schema.

Schema theory allows us to look at psychopathy outside the framework of social expectations and see that

**Table 3.** Spearman rank correlation coefficient for the overall scores of the Triarchic Psychopathy Measure (TriPM), Psychopathic Personality Traits Scale – Revised (PPTS-R) questionnaires and Young’s early maladaptive schemas ( $N = 150$ )

YSQ-S3-PL	TriPM (total)		PPTS-R (total)	
	Spearman's Rho	$p$	Spearman's Rho	$p$
Emotional Deprivation	<b>0.218**</b>	0.008	<b>0.384**</b>	0.001
Abandonment/Instability	-0.107	0.194	0.147	0.073
Mistrust/Abuse	<b>0.185*</b>	0.024	<b>0.378**</b>	0.001
Social Isolation/Alienation	0.131	0.110	<b>0.342**</b>	0.001
Defectiveness/Shame	0.128	0.121	<b>0.380**</b>	0.001
Failure	-0.137	0.097	0.116	0.158
Dependence/Incompetence	-0.010	0.908	<b>0.234**</b>	0.004
Vulnerability to Harm or Illness	-0.105	0.202	<b>0.192*</b>	0.019
Enmeshment/Undeveloped Self	-0.005	0.954	<b>0.193*</b>	0.018
Subjugation	-0.032	0.701	<b>0.217**</b>	0.008
Self-Sacrifice	-0.069	0.401	-0.082	0.320
Emotional Inhibition	0.089	0.149	<b>0.457**</b>	0.001
Unrelenting Standards/Hypercriticalness	0.082	0.318	<b>0.226**</b>	0.006
Entitlement/Grandiosity	<b>0.412**</b>	0.001	<b>0.596**</b>	0.001
Insufficient Self-Control and/or Self-Discipline	<b>0.199*</b>	0.015	<b>0.282**</b>	0.001
Approval-Seeking/ Recognition-Seeking	<b>0.190*</b>	0.020	<b>0.395**</b>	0.001
Negativity/Pessimism	-0.148	0.072	0.117	0.156
Punitiveveness	0.024	0.771	0.111	0.177

YSQ-S3-PL – Young Schema Questionnaire. \* $p < 0.05$ , \*\* $p < 0.01$

**Table 4.** Spearman rank correlation coefficient for the scores of the Triarchic Psychopathy Measure (TriPM), Psychopathic Personality Traits Scale – Revised (PPTS-R) general questionnaires and the individual domains of Young’s early maladaptive schemas ( $N = 150$ )

Domain YSQ-S3-PL	TriPM (total)		PPTS-R (total)	
	Spearman's Rho	$p$	Spearman's Rho	$p$
Disconnection/Rejection	0.142	0.084	<b>0.401**</b>	0.001
Impaired Autonomy and Performance	-0.085	0.304	<b>0.212**</b>	0.009
Impaired Limits	<b>0.375**</b>	0.001	<b>0.530**</b>	0.001
Other-Directedness	0.032	0.702	<b>0.250**</b>	0.002
Overvigilance/Inhibition	0.036	0.665	<b>0.300**</b>	0.001

YSQ-S3-PL – Young Schema Questionnaire. \* $p < 0.05$ , \*\* $p < 0.01$

its primary source is a permissive family characterized by a lack of parental authority, control, guidance, and responsibility [22]. When trying to explain the motives behind the behavior typical of psychopathy, it is useful to look at it from the perspective of coping responses to schemas. In the case of the Entitlement/Grandiosity schema, we can explain the above behaviors in terms of the response of conforming to the schema. The individual perceives himself or herself as better than others, seeks to create fear and anxiety in others, and overemphasizes his or her own merits [44].

In addition to the Entitlement/Grandiosity schema, the Mistrust/Abuse schema is also important for understanding the phenomenon of psychopathy. Our study showed that it correlates with psychopathy as measured

by each of the questionnaires used. This conclusion confirms reports by other researchers [31] and is consistent with psychologists’ reflections on the origins of psychopathy [45]. Positive associations of psychopathic personality traits with the described schema indicate the presence of key beliefs about the environment, which, according to the schema’s cues, are hurtful, dangerous, deceitful, and exploitative [46]. Again, in the search for the causes of psychopathic behavior, the demonstrated relationship must be contrasted with Young’s theory of three ways of dealing with a schema. In the case of Mistrust/Abuse, we can speak of a classic overcompensation schema. The individual has a belief in the evil intentions of those around him or her, so he or she acts according to the principle of “attacking before others attack you” [46].

He or she takes all necessary measures to avoid becoming a victim again, to preempt an attack, and to become a person who harms others [47].

Statistical analysis showed that the Disconnection/Rejection domain is the second most strongly correlated with psychopathy, after the Impaired Limits domain. Studies prove that the reasons for the development of psychopathic personality traits can be violence [45] and cases of alcoholism in the family [48]. Therefore, we can conclude that the source of psychopathy is likely to be an unmet need for security. This conclusion is in line with Young's concept, which outlines the domain of Disconnection/Rejection as a set of schemas originating in abusive, violent, unstable, and distant families [22].

This study also showed a significant, fairly strong and positive correlation of psychopathy with Emotional Deprivation. Together with Mistrust/Abuse, it represents the previously described domain of Disconnection/Rejection. In describing the family of origin characteristic of the aforementioned domain, Young adds characteristics such as distance, emotional coldness, rejection, withdrawal, and loneliness to the adjectives already mentioned [22]. According to Young's theory, these characteristics are responsible for the formation of Emotional Deprivation. The schema thus completes the picture of the psychopathic personality trait with a component of loneliness, isolation, loss of hope for understanding and satisfaction of emotional needs [43, 49].

The last of the schemas clearly associated with the psychopathic personality trait is Insufficient Self-Control and/or Self-Discipline. This conclusion is consistent with the reports of other researchers [31]. Based on a comprehensive description of the psychopathic personality trait that includes both the classifications and the components added by Cleckley and Hare, we can conclude that this schema is likely to be the source of traits such as irresponsibility and impulsivity. As a dominant way of coping, we can point to schema avoidance, which involves not engaging in situations that require responsibility and discipline [22].

It is worth noting that the schema belongs to the Impaired Limits domain. Together with Entitlement/Grandiosity, they exhaust the range of schemas in the aforementioned domain, thus emphasizing its centrality in the diagnosis and attempt to modify the psychopathic personality trait.

When examining the schema of Insufficient Self-Control and/or Self-Discipline, its correlation with secondary psychopathy should not be overlooked [31]. In the search for a single definition that perfectly describes the duality of the nature of psychopathy, we find many studies that outline sets of characteristics of primary and secondary psychopaths. Primary psychopaths are described in many studies as fearless [50], prone to manipulation and lacking in conscience [51], emotionally cold, using others for their own ends, using violence to achieve a goal, and

having high self-esteem [16]. Secondary psychopaths are described as individuals who experience severe anxiety, are impulsive, have low self-control, use violence [50], act under the influence of their mood, are insecure about their self-esteem, and are neurotic [16, 52].

Based on the distinct characteristics of both types of psychopathic personality, we can conclude that the Insufficient Self-Control and/or Self-Discipline schema largely explains the impulsiveness and lack of self-control of secondary psychopaths. In addition, researchers point to significant associations between primary psychopathy and the schemas shown in this study, i.e., Entitlement/Grandiosity, Mistrust/Abuse [31, 53].

It should be noted that the PPTS-R total score correlates significantly with all domains of the YSQ-S3-PL and with most of the 18 schemas, while such a correlation for the TriPM scale is observed only for Impaired Limits and for the schemas in this domain. Thus, it seems that the assumptions of Boduszek's model of psychopathy to go beyond the behavioral aspects of psychopathy and to look for its features in the non-criminal population seem valid [18]. On this basis it is also possible to formulate a hypothesis assuming the participation of other schemas located outside the domain of Entitlement/Grandiosity in the etiology of psychopathic personality traits. The results we obtained therefore pave the way for further analysis, in which the contribution of individual schemas to the formation of personality traits included in the PPTM model can be sought. Moreover, taking into account the results obtained, it can be concluded that the PPTS-R scale is a more sensitive tool than the TriPM scale for the diagnosis of psychopathic personality traits in the non-clinical and non-criminal population.

In our study, we found no effect of age on the results. Gender differentiated the examined persons in the subscale of meanness ( $t = -2.554, p = 0.011$ ) and in the total score ( $t = -2.126, p = 0.035$ ) for the TriPM scale, and in affective responsiveness ( $t = -2.235, p = 0.026$ ) and cognitive responsiveness ( $t = -2.114, p = 0.036$ ) for the PPTS-R scale. These results are in line with literature reports indicating that the gender factor is very strongly embedded in the concept of psychopathy [7]. They also open the way for further research on the issue of gender differences in Boduszek's model of psychopathy.

## LIMITATIONS

The study group was largely represented by young adults. Given that psychopathy is a disorder whose components lose intensity with age, the study may not present results applicable to all age groups. However, we found no effect of age on the results.

Gender differentiated the examined people in the subscale of meanness ( $t = -2.554, p = 0.011$ ) and in the total score ( $t = -2.126, p = 0.035$ ) for the TriPM scale, and in

affective responsiveness ( $t = -2.235, p = 0.026$ ) and cognitive responsiveness ( $t = -2.114, p = 0.036$ ) for the PPTS-R scale. These results are in line with literature reports indicating that the gender factor is very strongly embedded in the concept of psychopathy [35].

## SUMMARY

People with psychopathic personality traits are characterized by their repetition of certain early maladaptive schemas. With knowledge of the theory of early maladaptive schemas, we can describe family environments that predispose an individual to the development of the described personality trait, as well as ways of dealing with the schemas. This study

provides a rationale for the continued study of psychopathy in the context of schema theory. The issues of empathy, primary and secondary psychopathy, and the lack of clear links to specific schemas remain areas for further research.

## CONCLUSIONS

1. The schemas of Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Mistrust/Abuse, and Emotional Deprivation are all associated with psychopathic personality traits. The strongest correlations are in the Entitlement/Grandiosity schema.
2. The domain of early maladaptive schemas that is most strongly associated with psychopathy is Impaired Limits.

### Conflict of interest

Absent.

### Financial support

Absent.

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