

# Temperamental traits, defense styles and professional burnout among psychotherapists

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## Abstract

**Objectives:** It was decided to examine the relationships that exist between temperamental traits, defense styles and professional burnout in a group of psychotherapists. The overarching goal of this study was to examine how defense styles mediate the relationship between temperamental traits and burnout in psychotherapists.

**Methods:** Eighty-two individuals working in the psychotherapy profession participated in the study. Three psychological tools were used: (1) FCB-TI(R), (2) DSQ-40, (3) OLBI, as well as own questionnaire used to describe the study group.

**Results:** The conducted analyses showed associations between particular variables and allowed to confirm the mediating role of mature and immature defense styles in the relationship between temperamental traits (emotional reactivity, perseverance, endurance, activity) and burnout or at least one of its dimensions. In the case of neurotic defenses, the mediating effect did not occur.

**Discussion and Conclusions:** The results presented here indicate that temperament traits and defense styles are important variables in the study of professional burnout in psychotherapists. They suggest that certain temperament traits and defense styles may increase or decrease the risk of burnout, and that defense styles mediate the relationship between temperament traits and burnout in psychotherapists. Thus, the research hypotheses presented in the paper were mostly confirmed. Both education and self-improvement of psychotherapists should focus on strengthening mature defense mechanisms, which have a protective function in the process of burnout development, and eliminating the use of immature defenses, which intensify the relationship between certain temperament traits and burnout. This information could be useful in recruiting future professionals, their training and professional practice.

**temperamental traits; defense styles; professional burnout; psychotherapists**

## INTRODUCTION

People presenting the so-called helping professions, including psychotherapists, are particularly susceptible to the development of job burnout [1-13]. Numerous factors influencing this phenomenon can be indicated – starting from the

level of empathy, through direct contact with people in difficult life situations, to the organisation of work [14-20]. However, both environmental and personal factors are somehow secondary and often unstable, so they can be changed. For this reason, it seems worth paying attention to primary factors that are innate, such as temperamental traits [21, 22].

So far, temperamental traits have been identified as predictors of professional burnout, i.e. in

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groups of psychiatric nurses and psychotherapists (but in the configuration of other variables) [23-25]. Additionally, according to research, all temperamental traits show a relationship with burnout except for sensory sensitivity [26]. Unfortunately, there is still a lack of research on the variables influencing professional burnout among psychotherapists [27] and, moreover, there are conflicting views on the impact of temperament on burnout [28]. Some analyses indicate that temperamental traits play a protective role, while others suggest that the opposite is true [29-31]. Therefore, this study examines which temperamental traits may burden psychotherapists in their work and which may protect them against the development of professional burnout.

What is more, it seems that temperament is crucial in choosing defense mechanisms [32]. Therefore, an additional variable studied in this paper is defense mechanisms. They are defined as automatic, often involuntary psychological processes that occur outside a person's awareness and protect them against anxiety and other internal or external stressors [33-35]. Hence it can be assumed that defense mechanisms modify the perception of internal and external realities that the individual cannot cope with (in this case, stress and professional burnout). Furthermore, it seems that adaptive/mature defense mechanisms mitigate the resulting conflict and thus determine the individual's mental health [36-39].

Presumably, most psychotherapists have a repertoire of mature defense mechanisms, earned over years of self-development and their psychotherapy [40]. For this reason, they should be supported and protected against the unfavourable influence of certain temperamental traits. However, a review of past studies indicates that it has not been examined whether defense mechanisms mediate the relationship between temperamental traits and professional burnout among psychotherapists. So far, the mediating effect of defense mechanisms has been demonstrated among various professional groups, but using different mediating variables [41-47]. Therefore, in compliance with the presented theory, it can be assumed that defense mechanisms, depending on the level of maturity, have a protective or heavy effect in stressful situations, such as professional burnout.

The study analyses temperamental traits and defense mechanisms as substantial factors influencing the quality of psychotherapeutic work. Therefore, this study aims to analyse the relationship between temperamental traits and defense mechanisms and professional burnout, as well as to assess the importance of defense mechanisms as a mediator between temperamental traits and professional burnout among psychotherapists.

## METHODS

The hypotheses that will be presented later in the work were formulated based on available literature and research results on similar issues. The research questions and hypotheses are presented below:

1. What is the relationship between temperamental traits and professional burnout among psychotherapists?
2. What is the relationship between temperamental traits and defense styles among psychotherapists?
3. What is the relationship between defense styles and professional burnout among psychotherapists?
4. Do defense styles mediate the relationship between temperamental traits and professional burnout among psychotherapists, and if so, how do they modulate it?

**Research hypothesis 1:** Some temperamental traits correlate positively and some negatively with professional burnout among psychotherapists.

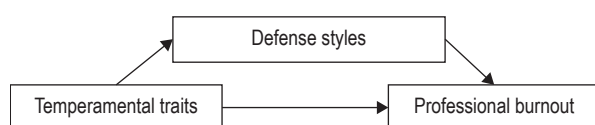
**Research hypothesis 2:** Some temperamental traits correlate positively and some negatively with particular defense styles among psychotherapists.

**Research hypothesis 3:** Defense styles, depending on the level of maturity, correlate positively or negatively with professional burnout.

**Research hypothesis 4:** The defense style modulates the relationship between temperamental traits and professional burnout. Depending on the level of maturity of the psychotherapist's defense mechanisms, this correlation changes (intensifies or weakens).

To answer the above research questions, a research model was developed that covers factors

between which relationships and mediating effects may occur.



**Figure 1.** A research model.

Source: Own study.

The respondents were searched among psychotherapists working in various fields of psychotherapy and various types of mental health centers. During the study, each person was asked to complete a survey and three psychological questionnaires. Thanks to this, it was possible to measure individual variables and then conduct their correlation and mediation analysis.

The following research tools were used: Formal Characteristics of Behaviour – Temperament Inventory in the revised version (FCB-TI) by M. Cyn-

iak-Cieciura, B. Zawadzki and J. Strelau, (2) Defense Style Questionnaire – DSQ-40 in the Polish adaptation by A. Kokoszka, (3) Oldenburg Burnout Inventory – OLBI in the Polish adaptation by T. Chirkowska-Smolak, as well as the author's survey developed to describe the study group.

The self-developed survey included questions about the gender and age of psychotherapists, as well as the studies they completed. They were asked questions related to their profession, the psychotherapist's certificate, psychotherapeutic field and place of work. Moreover, the survey contained issues related to their total job seniority and on current position. This was a condition set by the OLBI questionnaire's author, enabling the use of this tool.

## RESULTS

The analysis of the results began with the characteristics of the study group.

**Table 1.** Characteristics of the study group (N=82)

Variable			
Gender (n, %)	Woman	73	89
	Man	9	11
Age (M, SD)	Woman	39.38	9.163
	Man	41.00	8.746
	Altogether	39.56	9.080
Studies (n, %)	Psychological	72	88
	Pedagogical	8	10
	Sociological	1	1
	Medical	3	4
	Other	9	11
Psychotherapeutic certification (n, %)	Yes	23	28
	No	59	72
Field (n, %)	Psychoanalytic	7	9
	Psychodynamic	43	52
	Cognitive-behavioural	10	12
	Systemic	34	41
	Humanistic – existential	7	9
	Integrative	15	18
	Other	3	4

Employment (n, %)	Public sector	48	59
	Private sector	31	38
	Self-employment	55	67
Seniority (M, SD)	Woman	9.08	7.631
	Man	12.00	5.937
	Altogether	9.40	7.489

Source: Own Study.

### Descriptive statistics

In the first step, the following descriptive statistics were determined for the analysed questionnaire variables and normality analysis was performed.

**Table 2.** Descriptive statistics and normality analysis for temperamental traits measured by Formal Characteristics of Behaviour: Temperament Inventory in a revised version (FCB-TI) among studied psychotherapists (N=82).

Variable	M	ME	SD	MIN	MAX	S-W	P
Briskness	43.90	43.00	6.005	32.00	59.00	0.975	0.109
Perseverance	40.24	40.00	5.916	23.00	55.00	0.982	0.293
Rhythmicity	23.22	23.00	5.271	11.00	35.00	0.986	0.542
Sensory Sensitivity	46.09	46.00	5.419	33.00	60.00	0.986	0.495
Endurance	33.88	32.00	7.625	16.00	52.00	0.981	0.256
Emotional Reactivity	36.79	36.00	6.246	19.00	55.00	0.979	0.189
Activity	37.49	38.00	7.564	20.00	57.00	0.985	0.442

Source: Own Study.

**Table 3.** Descriptive statistics and normality analysis for defense styles measured by the Defense Styles Questionnaire (DSQ-40) of the psychotherapists surveyed (N=82).

Variable	M	ME	SD	MIN	MAX	S-W	P
Mature defenses	5.70	5.50	0.972	3.38	7.75	0.962	0.015*
Neurotic defenses	3.60	3.75	0.925	1.38	5.88	0.981	0.266
Immature defenses	3.34	3.29	0.776	1.63	5.92	0.979	0.200

Source: Own study.

**Table 4.** Descriptive statistics and normality analysis for professional burnout measured by the Oldenburg Burnout Inventory (OLBI) of the surveyed psychotherapists (N=82).

Variable	M	ME	SD	MIN	MAX	S-W	P
Disengagement	16.87	17.00	3.822	8.00	26.00	0.977	0.146
Exhaustion	18.04	18.00	3.473	10.00	25.00	0.979	0.187

Source: Own study.

### Temperamental traits, professional burnout and defense styles among psychotherapists

Then the relationships between temperamental traits and professional burnout and defense styles among psychotherapists were shown.

**Table 5.** The relationship between temperamental traits and professional burnout and defense styles among psychotherapists (N=82).

Temperamental traits	Disengagement	Exhaustion	Mature defenses	Neurotic defenses	Immature defenses
Briskness	-0.129	-0.190	0.180	-0.031	-0.091
Perseverance	0.339**	0.335**	-0.259*	0.306**	0.416**
Rhythmicity	-0.057	0.017	0.186	-0.003	-0.083
Sensory Sensitivity	-0.097	-0.049	0.257	0.015	0.115
Endurance	-0.151	-0.315**	0.139	-0.119	-0.264*
Emotional Reactivity	0.435**	0.477**	-0.287**	0.382**	0.344**
Activity	-0.356**	-0.354**	0.125	-0.030	-0.242*

Source: Own study

\*p<0,05, \*\*p<0,01

### Psychotherapists' defense styles and professional burnout

Then the relationships between defense styles and professional burnout among psychotherapists were shown.

**Table 6.** The relationship between defense styles and professional burnout among psychotherapists (N=82).

Defense styles	Disengagement	Exhaustion
Mature defenses	-0.243*	-0.352**
Neurotic defenses	0.018	0.112
Immature defenses	0.342**	0.349**

Source: Own study.

\*p<0,05, \*\*p<0,01

### Temperamental traits of psychotherapists and professional burnout, taking defense styles into account

The adopted theoretical model assumed that defense styles can play a mediating role in the relationship between temperamental traits and professional burnout. Mediation analysis was conducted in accordance with the three-stage approach proposed by Baron and Kenny (1986) and Bedyńska (2012).

It assumes that the mediation effect occurs when three conditions are met:

- the explanatory variable significantly influences the response variable
- the explanatory variable significantly influences the mediator
- including a mediator in the analysis excludes or reduces the influence of the explanatory variable.

Subsequent analyses were carried out according to the above scheme, and breaking any condition excluded the mediation of the variables and ended the analysis.

First condition: *the explanatory variable significantly influences the response variable* was met for the following dependencies:

- Perseverance and Disengagement ( $\beta=0.339$ ,  $F=10.376$ ,  $p<0.05$ ) and Exhaustion ( $\beta=0.335$ ,  $F=10.103$ ,  $p<0.05$ )
- Endurance and Exhaustion ( $\beta=-0.315$ ,  $F=8.842$ ,  $p<0.05$ ),
- Emotional Reactivity and Disengagement ( $\beta=0.435$ ,  $F=18.646$ ,  $p<0,05$ ) and Exhaustion ( $\beta=0.477$ ,  $F=23.536$ ,  $p<0.05$ ),



- Activity and Disengagement ( $\beta=-0.356$ ,  $F=11.638$ ,  $p<0.05$ ) and Exhaustion ( $\beta=-0.354$ ,  $F=11.470$ ,  $p<0.05$ )

Second condition: *the explanatory variable significantly influences the mediator* was met for the following dependencies:

- Perseverance and Mature ( $\beta=-0.259$ ,  $F=5.745$ ,  $p<0.05$ ), Neurotic ( $\beta=0.306$ ,  $F=8.274$ ,  $p<0.05$ ) and Immature ( $\beta=0.416$ ,  $F=16.769$ ,  $p<0.05$ ) Defense Styles,
- Endurance and Immature ( $\beta=-0.264$ ,  $F=6.008$ ,  $p<0.05$ ) Defense Style,
- Emotional Reactivity and Mature ( $\beta=-0.287$ ,  $F=7.159$ ,  $p<0.05$ ), Neurotic ( $\beta=0.382$ ,  $F=13.632$ ,  $p<0.05$ ) and Immature ( $\beta=0.344$ ,  $F=10.730$ ,  $p<0.05$ ) Defense Styles,
- Activity and Immature ( $\beta=-0.242$ ,  $F=4.982$ ,  $p<0.05$ ) Defense Style.

The introduction of the mediator, mature defense style, contributed to reducing the impact of perseverance on both dimensions of professional burnout (disengagement  $B(SE)=0.191(0.070)$ , exhaustion  $B(SE)=0.153(0.062)$ ). The Sobel test confirmed the mediation effect for the burnout dimension of exhaustion ( $Z=1.9$ ,  $p<0.05$ ). However, there was no mediation for disengagement ( $Z=1.63$ ,  $p>0.05$ ). In turn, the introduction of the mediator, the neurotic defense style, contributed to increasing the impact of perseverance on disengagement, and for exhaustion, the beta factor was very close to the value without taking the mediator into account. The Sobel test did not confirm the mediating effect for both dimensions of burnout (disengagement  $Z=0.16$ ,  $p>0.05$ , and exhaustion  $Z=0.95$ ,  $p>0.05$ ). The introduction of immature defense styles as a mediator resulted in a reduction in the influence of perseverance on both dimensions of burnout (disengagement  $B(SE)=0.154(0.073)$ , exhaustion  $B(SE)=0.135(0.065)$ ). The Sobel test confirmed the mediation effect of immature defense mechanisms on the impact of perseverance on burnout (disengagement  $Z=2.58$ ,  $p<0.05$ ) and exhaustion ( $Z=2.61$ ,  $p<0.05$ ).

The introduction of the mediator, which was an immature defense style, contributed to a slight reduction in the impact of endurance on professional burnout in the dimension of exhaustion ( $B(SE)=-0.190(0.048)$ ). The Sobel test

confirmed the mediation effect of immature defense mechanisms on the impact of endurance on the professional burnout dimension of exhaustion ( $Z=-1.98$ ,  $p<0.05$ ).

The introduction of the mediator, the mature defense style, contributed to reducing the impact of emotional reactivity on both dimensions of professional burnout (disengagement  $B(SE)=0.244(0.064)$ , exhaustion  $B(SE)=0.228(0.055)$ ). The Sobel test confirmed the mediation effect for the burnout dimension of exhaustion ( $Z=2.08$ ,  $p<0.05$ ). However, there was no mediation effect for disengagement ( $Z=1.71$ ,  $p>0.05$ ). In turn, the introduction of the mediator, the neurotic defense style, contributed to a slight increase in the impact of emotional reactivity on disengagement ( $B(SE)=0.306(0.066)$ ) and exhaustion ( $B(SE)=0.283(0.059)$ ). The Sobel test did not confirm the mediation effect for both dimensions of professional burnout (disengagement  $Z=0.16$ ,  $p>0.05$ ) and exhaustion ( $Z=0.97$ ,  $p>0.05$ ). The introduction of Immature defense style as a mediator contributed to reducing the impact of Emotional reactivity on both dimensions of professional burnout (Disengagement  $B(SE)=0.220(0.064)$ , Exhaustion  $B(SE)=0.225(0.057)$ ). The Sobel test confirmed the mediation effect of immature defense mechanisms on the impact of emotional reactivity on professional burnout (disengagement  $Z=2.32$ ,  $p<0.05$ ), exhaustion ( $Z=2.35$ ,  $p<0.05$ ).

The introduction of the mediator, the Immature defense style, contributed to reducing the impact of the Activity on both dimensions of burnout (Disengagement  $B(SE)=-0.147(0.053)$ , Exhaustion  $B(SE)=-0.132(0.048)$ ) The Sobel test confirmed the mediation effect of immature defense mechanisms on the impact of the activity on burnout (disengagement  $Z=2.15$ ,  $p<0.05$ ), exhaustion ( $Z=2.24$ ,  $p<0.05$ ).

## DISCUSSION AND CONCLUSIONS

The results presented above demonstrate that temperamental traits and defense styles are important variables in the study of professional burnout among psychotherapists. They suggest that specific temperamental traits and defense styles may increase or reduce the risk of professional burnout and that defense styles mediate

the relationship between temperamental traits and professional burnout among psychotherapists. Therefore, the research hypotheses presented in the study were mostly confirmed.

Information about the temperamental traits and defense styles of psychotherapists, as well as knowledge of their protective or aggravating effects on the development of professional burnout, could be useful when recruiting future specialists, as well as in the process of their education and self-development. This knowledge would presumably also help psychotherapists in their professional practice. Therefore, the following conclusions can be drawn from this research:

- 1) Psychotherapists with a higher level of emotional reactivity and/or perseverance tend to use neurotic and immature defense styles and are more likely to develop professional burnout.
- 2) Psychotherapists with a higher level of activity and/or endurance are less likely to use immature defense style and are at lower risk of developing professional burnout.
- 3) Nevertheless, psychotherapists can modify the repertoire of defense mechanisms used and thus protect themselves against the development of professional burnout, even if they have a temperamental predisposition to it. Probably mature defense mechanisms act in a protective way, immature defense mechanisms – in an aggravating way, and neurotic defense mechanisms – in a neutral way on the development of professional burnout among psychotherapists. It should be remembered that since defense mechanisms are unconscious (at least to a large extent), psychotherapists need their own therapy and constant care for the development towards maturity of the observing ego/mentalization etc.

The obtained results are valuable because they were obtained in a group diverse in terms of age, education, psychotherapeutic trend, place and work experience. However, they may indicate the need for repeating the research on a larger sample and further exploration of this topic due to the shortage of publications devoted to psychotherapeutic work. The importance of other temperamental traits that did not

reveal any correlations in the study seems worth considering, as well as neurotic defense mechanisms that are neutral. An interesting perspective could also be narrowing down the study group due to the nature of the psychotherapy being conducted (e.g. individual, couples, family, group), type of patient/client (e.g. children, adolescents, adults) or work environment (e.g. psychiatric ward, own office). The suggested analyses would presumably show whether the nature of work influences the discussed relationships due to the specificity of the burdens occurring in the profession of a psychotherapist.

Conducting further research seems important, especially due to the growing demand for mental health services and the related training of an increasing number of specialists. For example, awareness that psychotherapists with specific temperamental traits tend to use particular defense mechanisms or knowledge of the impact of the defenses used on professional burnout may prove crucial in the course of psychotherapy and establishing a therapeutic relationship with the patient/client. It also seems valuable to understand that internal resources, biologically constituted, may support or threaten psychotherapeutic work, so it is worth taking a closer look at them. This awareness may be useful, especially in difficult situations, such as the COVID-19 pandemic, when access to other resources is limited.

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