



You have downloaded a document from  
**RE-BUŚ**  
repository of the University of Silesia in Katowice

**Title:** Development and validation of the Influence Regulation and Deinfluencization Scale (DEI-beh)

**Author:** Barbara Kozusznik, Anita Pollak, Dominik Adamek, Damian Grabowski

**Citation style:** Kozusznik Barbara, Pollak Anita, Adamek Dominik, Grabowski Damian. (2015). Development and validation of the Influence Regulation and Deinfluencization Scale (DEI-beh). "Polish Journal of Applied Psychology" (Vol. 13, nr 4 (2015), s. 91-108), doi 10.1515/pjap-2015-0044



Uznanie autorstwa - Użycie niekomercyjne - Bez utworów zależnych Polska - Licencja ta zezwala na rozpowszechnianie, przedstawianie i wykonywanie utworu jedynie w celach niekomercyjnych oraz pod warunkiem zachowania go w oryginalnej postaci (nie tworzenia utworów zależnych).



UNIwersYTET ŚLĄSKI  
W KATOWICACH



Biblioteka  
Uniwersytetu Śląskiego



Ministerstwo Nauki  
i Szkolnictwa Wyższego

Barbara Kożusznik, Anita Pollak, Dominik Adamek, Damian Grabowski<sup>1</sup>  
*University of Silesia*

## Development and Validation of the Influence Regulation and Deinfluentionization Scale (DEI-beh)

### Abstract

Our article presents work on the development and validation of *Influence Regulation and Deinfluentionization Scale (DEI-beh)*. Reviewing concepts regarding its influence constitutes an introduction to the original deinfluentionization concept coined by Barbara Kożusznik. The author's theory has provided the basis for creating a diagnostic tool. The elaborated *DEI-beh* method consists in evaluating conditions which determine managerial effectiveness and shape reciprocal influences among team members. Our article describes this tool's creation and its validation procedure. Positive relationships between *DEI-beh*'s individual dimensions and temperament characteristics, defined in Pavlov's concept (1952), and selected personality traits, proposed in the Five-Factor Model Personality by Costa and McCrae (1992), confirm the tool's external validity.

### Keywords

Influence Regulation Scale, psychometric properties, deinfluentionization, DEI

### Streszczenie

Artykuł prezentuje efekt prac nad *Kwestionariuszem do pomiaru regulacji wpływu oraz deinfluentionizacji (DEI-beh)*. Przegląd koncepcji dotyczących wpływu w organizacji, stanowi wprowadzenie do autorskiej koncepcji deinfluentionizacji Barbary Kożusznik. Bazując na proponowanej przez autorkę teorii, utworzono narzędzie diagnostyczne. Opracowana metoda *DEI-beh* opiera się na pomiarze warunków, od których zależy skuteczność zachowań kierowniczych i które kształtują układ wzajemnego wpływu w zespole. Artykuł zawiera opis tworzenia narzędzia oraz przebiegu i efektów jego procedury walidacyjnej. Pozytywne związki między poszczególnymi wymiarami *DEI-beh* a właściwościami temperamentu, ujętymi w koncepcji Pawłowa (1952) oraz wybranymi cechami osobowości, proponowanymi w Pięciodzownikowym Modelu Osobowości Costy i McCrae (1992), potwierdzają trafność zewnętrzną tego narzędzia.

### Słowa kluczowe

Skala Regulacji Wpływu, właściwości psychometryczne, deinfluentionizacja, DEI

---

<sup>1</sup> Barbara Kożusznik, Anita Pollak, Dominik Adamek, Damian Grabowski, University of Silesia, Faculty of Pedagogy and Psychology, Institute of Psychology, Department of Work and Organizational Psychology, ul. Grażyńskiego 53, 40-126 Katowice; barbara.kozusznik@us.edu.pl; anita.pollak@us.edu.pl; dominik.adamek@us.edu.pl; damian.grabowski@us.edu.pl

## Introduction

To remain competitive and survive in a complex, volatile and unpredictable environment it is requisite that organizations push constant changes and innovations. The competencies that will be most valuable to a future leader are the following: adaptability, creativity, self-awareness, collaboration (Hackman, 2002; Goleman, 1997; Pink, 2005; Bass, 2008; Cropley, Cropley, 2010; Yukl, Mahsud, 2010). Also the most important is if organizations are comfortable with ambiguity and think strategically for optimizing performance, meet expectations and compete effectively (Mumford, Friedrich, Caughron, & Byrne, 2007). This means that contemporary organizations demand innovativeness from themselves and their workers. Devising conditions for creativity and innovations requires a climate of cooperation, particularly in industrial relations. Psychological knowledge and skills to realize this climate are necessary to develop (Cropley, Cropley, 2010; Denning, 2004; Drucker, 1985). There is a body of research indicating that a number of psychological barriers exist that stall innovativeness in social dialogue due to poor collaboration and lack of trust between employers, managers, workers' representatives and employees (Munduate, Euwema, & Elgoibar, 2012; Euwema, Munduate, Elgoibar, Pender, & Belén García, 2015; Kożusznik, Polak, 2015). A growing uncertainty and a declining sense of security cause an upsurge in defensive and competitive behavior which understandably leads to erosion and atrophy of trust and finally results in poor cooperation and weak economical results (Edelman Trust Barometer, 2015). The accompanying phenomenon is leadership over-use by managers and groups that try to control and abuse their influence. As a consequence, teamwork and cooperation at work appears to be an ongoing necessity.

Many managers and researchers agree that globalization processes and technological innovation in numerous countries require a completely new management model: a shift focus from leadership realized by a person or a role to leadership perceived as a process (Goleman, 2004, Hackman, 2002; Kaiser, Lindberg & Craig, 2007). A key distinction in the new model is that leadership can be enacted by anyone; it is not tied to a position of authority in the hierarchy. Who is the leader becomes less important than what is needed in the system and how we can produce it. In other words, it is a shift from individual power exertion towards more participative and autonomous systems of influence.

There is still a problem in Poland with the forceful leadership style overuse by managers. Polish managers concentrate rather on interpersonal relations and try to make the impression of taking into account workers' opinions. Transformational changes in Poland have not influenced managerial behavior, which remains autocratic (Kożusznik, 1995; Adamiec & Kożusznik, 2000; Nosal, 2010). Research by the 'Hay Group' indicates that Polish leaders differ from leaders abroad in respect to flexibility interpreted by

workers in a workplace as being limited (Hay Group report, 2008). It has been established that numerous Polish leaders use only one chosen style.

How does one change managerial behavior, as well as our own behavior, so as not to cling to one style when there is still a question of the role of traditional “forceful” managerial styles which seem to be effective in some situations? Forceful influenced behavior is aimed at blocking non-compliance behavior, or making such behavior too unattractive for it to be performed (Emans, Munduate, Klaver, Van de Vliert, 2003). These authors argue that forceful influence styles play a constructive part when used together with other styles playing a significant catalyst role, shifting the impact of non-forcing behavior favorably.

Two essential ways to build a sense of security in social relations, that is, through control and through trust, often remain in conflict with each other. Parties primarily focusing on control and using unilateral power do not create a base for trust among social partners. More importantly, this hinders creativity in problem solving and generating new ideas.

The question arises why should and how can managers as well as employees reduce their influence and control?

### **Concept of deinfluencing**

The answer is *deinfluencing*, a concept coined by Kożusznik (2005, 2006) as a phenomenon to consciously regulate and reduce influence by a leader, a whole group or each individual employee to make it possible to use effectively each element within the organization and to accomplish its main tasks. We assume that behaviors and social techniques revealed, in cooperation, as reducing one’s own importance and making space available for others are skills which can be trained and coached (Kożusznik, 2005). It is contradictory to typical managerial habits, where managers understand such reduction as proof that they are weak. That is why we think it is necessary to refer to an ethical reservoir which gives rise to individual readiness to sacrifice one’s comfort and interests. Partners’ behavior in a dialogue remains ethical as long as they are able to perceive organizational purposes in a broad perspective and incorporate their core values, being called spiritual ones by us, into a dialogue process. Our conclusion is that diminishing one’s influence is not only a behavioral technique but also is grounded in virtue.

Deinfluencing means that you do not have to change your tactics from cooperation or participation to pressure or coercion but first just stop it, reduce it, withdraw from it. It concurs with Schein (1988) that for most managers it is psychologically almost impossible to be so flexible – that in one situation you are “hard and macho”, and in another you are rational, soft and feminine. This seems to be especially difficult for managers in Poland.

Deinfluencing involves conscious withdrawal of influence by a leader to generate the individuals' influence and power and the team as the whole so that appropriate team processes are facilitated (Kożusznik 1996, 2002, 2004). It also allows the team to be more productive. Deinfluencing means suppressing one's will to force someone to do something; it means stopping attempts to persuade someone to do something, being silent and waiting for others to talk, not being angry and disruptive during discussions, reducing one's influence when someone else's influence is more appropriate, and helping others to participate in work processes. According to Lewin's ideas (1952), the creation of external circumstances as described above is based on the *power game* which takes place in workplaces. This is a common phenomenon accompanying changes in organizational situations and is a characteristic struggle for influence among three main elements of the workplace: the leader, each individual worker and the group of workers as a whole.

Deinfluencing is when a leader consciously withdraws influence, a withdrawal which is appropriate to situational demands. It plays a fundamental role in leadership behavior, in participation processes and in promoting the full use of human capital in an organization giving free space to use workers' competences and abilities. As mentioned above, deinfluencing refers first of all to the leader who has the formal insignia of authority to become also the *influence regulator*. It can be understood on the basis of two different dimensions:

- reducing one's own influence – suppressing one's will to force someone to do something; it means stopping attempts to persuade someone to do something, being silent and waiting for others to talk, not be angry by being disruptive during discussion, reducing one's own influence when someone else's influence is more appropriate.
- making space available for others. There are some active forms of behavior which give space for others to talk, to force into the open someone else's idea: looking after people who talk, offering a place to talk, taking care of private distance, active listening, stopping, the ability to draw persons out so that all members participate, the ability to tolerate pauses, protect individuals so that other group members might attack verbally, prevent talkative individuals from dominating without rejecting them.

On the basis of Kożusznik's (2005, 2006) previous research, we have come to the conclusion that the DEI managers (both men and women) achieved the highest results in positive factors – social competencies, emotional acceptance of a managerial role, developmental potential and effectiveness (in their supervisors' opinion). That is why we can apply the term *leadership positive behavior* to the managers consciously withdrawing influence. The DEI managers seem to be rather strong and resilient – with evidence

of good stress tolerance in work situations (Kozusznik, 2002). The problem of reducing one's behavioral impact or consciously withdrawing one's influence seems to be very important in making managerial work more effective.

## **Item Pool Development**

A starting point for constructing the *Influence Regulation and Deinfluencing Scale (DEI-beh* in short) was to presuppose that people vary in terms of their skill in regulating their own influence, that is, the degree to which they allow others to exert influence in a given situation since they consider their own influence as inadequate to requirements. In the first place, a tool was prepared for evaluating behavioral reactions, comprising a deinfluencing notion, of a respondent as a self-reporter (an agent version), and then a further version was developed where a test result stems from evaluating persons collaborating with a respondent (a target version).

The construction of the questionnaire consisted in collecting opinions on behavior of the persons who regulate their influence and strive to exercise maximum influence on all group members and on an interlocutor. The opinions were formulated by the persons working in various professions and workplaces. The statements referred only to actual behaviors which occur when a person states that in a given situation the influence is attributed to someone else (an individual or a group), and that their own influence is ineffective and unacceptable, or their own repertoire of available influence tactics has been exhausted. Consequently, they wish to cooperate with a given individual or a group as long as possible and in an effective manner at the expense of weakening their own influence.

The collected definitions and descriptions were subject to linguistic analysis and two dimensions have been identified: the one aimed at reducing the individual's own importance, and the other relating to making space at work available to others. A list of 35 statements was obtained which described behaviors of those persons characterized by highly reduced influence and importance and deinfluencing. The list was evaluated regarding a given statement and its significance. As a result, 20 statements remained which were recognized by competent arbiters as the most characteristic phenomenon of deinfluencing. The arbiters originated from a group of academics from higher education institutions dealing with work issues and the organizational psychology of both management and managers in medium and large companies.

It comprises three scales: reducing one's own importance and influence (RI), making space available to others (MSA), and a scale measuring social approval (SA) which constitutes the scale of lies. The former two include ten statements each and the latter contains four items.

The respondents' task was to mark which behaviors they found vitally characteristic or only slightly characteristic of themselves (DEI-beh agent version). The higher the general result, the greater the individual's willingness to deinfluensize and the better their developed skill to regulate their own and others' influence. The regulating process consists in the reduction, weakening and complete deprivation of one's own influence. DEI-beh may be employed to examine whether one's own importance in a given situation is reduced or whether space is made available to other people. The result obtained on the RI, which comprises statements by people consciously regulating their influence, informs about a level of this regulation based on presented communication behaviors. And/Or they focus on an interlocutor's non-verbal confirmations of acceptance and facilitation of a mutual role transfer between an addresser and addressee. A significant evaluative aspect is the perceived efforts undertaken to improve an interlocutor's emotional well-being and their thoughts sensed during a meeting, while the part representing the persons making space available to others (MSA scale) depicts the intensity of behaviors aimed at improving communication conditions and functioning. In this part a person indicates activities which determine that a desired result is achieved. Tables 1 and 2 below show the statements falling under the categories: reduction of importance (RI) and making space available (MSA).

Table 1

*Statements describing behaviors of persons consciously reducing their own importance*

No.	Statement number	Statement content
1.	1	Is able to remain silent although they could take part in a conversation.
2.	2	Is able to wait through a break in a conversation.
3.	4	Is able to abstain from commenting.
4.	6	Can diminish one's own importance in a conversation.
5.	7	Can lower one's gaze not to cause embarrassment to an interlocutor.
6.	8	Is able to change a conversation topic without causing embarrassment to an interlocutor.
7.	9	Keeps calm when their talk is interrupted.
9.	10	Is able to acknowledge their mistakes.
10.	16	Can backtrack.
11.	20	Keeps a serene facial expression despite a difficult situation.

*Note:* Own elaboration.

Table 2

Statements describing behaviors of persons making space available to others

No.	Statement number	Statement content
1.	3	Is able to encourage others to express their opinions.
2	5	Cares about maintaining proper space in contacts with others.
3.	11	Tries to respect private, intimate space between persons (e.g. restrains from involuntary touching others during a conversation).
4.	12	Can move over to make room for someone.
5.	13	Keeps eye contact with an interlocutor.
6.	14	Arranges space to make it comfortable for participants in a conversation.
7.	15	Approves of other people's ideas.
8.	17	Calms down noise and talking that make it impossible for others to express their opinions.
9.	18	Waits until others finish their utterance.
10.	19	Cares about appropriate and convenient distance between people.

Note: Own elaboration.

### Factorial validity and reliability of the DEI scale

The next step was to conduct confirmatory factor analysis in order to determine whether one-factor and three-factor models would be supported by empirical data (Konarski, 2009). The fit evaluation was based on the mean square error of approximation or root-mean-square error RMSEA. The fit evaluation was based on the following indices values: Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), Standardized Root Mean Square Residual (SRMR) and Normed Fit Index (NFI) (Scher-melleh-Engel, Moosbrugger, Müller, 2003).

The models were tested with correlated latent variables which used a covariance matrix of 24 items obtained in examinations of 512 managers. This sample was divided randomly by the Statistica 12.0 software package into two smaller subsamples in which the first group included 265 persons and the other 247 persons. The first subsample data were subject to analysis to compare the fit of the one-factor model and the three-factor model, which comprised the following dimensions: Reduction of importance (RI), Making space available (MSA), and Social approval (SA) (measured by the lie scale). Both MLE (*Maximum Likelihood Estimation*) and RML (*Robust Maximum Likelihood*) were employed. The RML estimation is fault-tolerant statistics in respect to errors arising from non-conformity of empirical distribution with normal distribution. Statistics choice was determined by the fact that the distribution of some items diverged from the normal distribution. The findings are presented in Tables 3 and 4. The results in the Tables below show that three models were analyzed with equivalent factors. The worst fit with the data



was achieved by the one-factor model. The best fit was demonstrated by the three-factor model. The CFI value was approximately or higher than 0.90. The SRMR and RMSEA values are slightly above or below the 0.08 critical value. The  $\chi^2/df$  measures reached the value below the critical 3. It indicates a reasonably satisfactory fit of the three-factor model to the data.

Table 3

Results of confirmatory factor analysis: comparison of fit to alternative factor models DEI N = 265 (ML estimation)

Model	$\chi^2(df)$	$\chi^2/df$	RMSEA	CFI	NFI	SRMR	$\Delta \chi^2$
1-factor	803.52 (252)***	3.19	0.091	0.86	0.80	0.080	191.36***
3-factor	659.68 (249)***	2.65	0.083	0.88	0.82	0.077	–

\*\*\* $p < 0.001$

Table 4

Results of confirmatory factor analysis: comparison of fit to alternative factor models DEI N = 265 (RML estimation)

Model	SB- $\chi^2$	$\chi^2/df$	RMSEA	CFI	NFI	SRMR	$\Delta \chi^2$
1-factor	691.93 (252)***	2.74	0.081	0.87	0.81	0.080	166.48***
3-factor	604.26 (249)***	2.43	0.074	0.90	0.83	0.077	–

\*\*\* $p < 0.001$

SB- $\chi^2$  – Satorra-Bentler Scaled Chi-Square

The next confirmatory analysis was conducted on data collected from the other group. The 3-factor model fit to covariation of 24 items was verified. The following fit factors were obtained:  $\chi^2(df) = 588.77 (249)$ ;  $\chi^2/df=2.36$ ;  $RMSEA=0.074$ ;  $CFI=0.90$ ;  $NFI=0.83$ ;  $SRMR=0.079$  (ML);  $\chi^2(df) = 503.71 (249)$ ;  $\chi^2/df=2.02$ ;  $RMSEA=0.064$ ;  $CFI=0.91$ ;  $NFI=0.85$ ;  $SRMR=0.079$  (RML), which indicates that a satisfactory fit was achieved. Table 5 presents completely standardized factor loadings (lambda  $\lambda$ -X, *Completely Standardized Solution*). Except for item 17, all the coefficients proved to be statistically very significant at a level of  $p < 0.001$ . Item 17 has a very low loading while the other items achieved loadings equal to or above 0.27 (item 20), and all the remaining items, apart from 15 and 20 have loadings equal to or above 0.30. The removal of item 17 insignificantly improves fit measure values (CFI assumes a value above 0.9).

Table 5

Confirmatory factor analysis model. Factor loadings (Completely Standardized Solution  $\lambda - X$ ,  $\lambda - X$ ) of individual questionnaire items DEI. ( $N = 247$ )

Factors:	Reduction of importance	Making space available	Social approval
Items	$\lambda - X$	$\lambda - X$	$\lambda - X$
1	0.52	–	–
2	0.46	–	–
3	–	0.37	–
4	0.46	–	–
5	–	0.64	–
6	0.42	–	–
7	–	–	0.62
8	0.64	–	–
9	–	–	0.63
10	0.41	–	–
11	0.51	–	–
12	0.43	–	–
13	–	0.53	–
14	–	0.60	–
15	–	–	0.28
16	–	0.49	–
17	–	–	0.05
18	–	0.59	–
19	–	0.50	–
20	0.27	–	–
21	–	0.45	–
22	0.45	–	–
23	–	0.69	–
24	0.44	–	–

Table 6

Confirmatory factor analysis model. Correlation of latent variables ( $N = 247$ )

	Reduction of importance	Making space available	Social approval
Reduction of independence	–	–	–
Making space available	0.60	–	–
Social approval	0.97	0.73	–

Table 6 above shows the correlation of latent variables. It is noticeable that reducing importance (RI) and social approval (AS) correlate quite significantly.

To sum up, the conforming factor analysis showed that the 3-factor model fit reasonably satisfactory the data obtained by means of the 24-item questionnaire, which demon-

strates the DEI questionnaire's factorial validity. Using the questionnaire is most effective when as a tool it includes two scales. It is important to add that the conforming factor analysis carried out on the item pool scales of reduction of importance and making space available allows one to use the DEI as a one-dimensional method. The fit measure, whose value is a one-dimension indicator, that is, an RMR (Song, Singh, Singer, 1994), and to be precise in its standardized SRMR form, assumes the value below 0.08 (0.074).

The confirmatory analyses conducted on the item pool scales of reduction of importance and availability brought similar results, and the fit measures reached a reasonably satisfactory level like the ones presented above [The first sample:  $\chi^2(df)=449.72$  (169);  $\chi^2/df=2.66$ ;  $RMSEA=0.079$ ;  $CFI=0.90$ ;  $NFI=0.84$ ;  $SRMR=0.073$  (ML);  $\chi^2(df)=381.04$  (169);  $\chi^2/df=2.25$ ;  $RMSEA=0.069$ ;  $CFI=0.92$ ;  $NFI=0.86$ ;  $SRMR=0.073$  (RML). The second sample:  $\chi^2(df)=390.62$  (169);  $\chi^2/df=2.31$ ;  $RMSEA=0.073$ ;  $CFI=0.91$ ;  $NFI=0.84$ ;  $SRMR=0.081$  (ML);  $\chi^2(df)=337.27$  (169);  $\chi^2/df=2.00$ ;  $RMSEA=0.064$ ;  $CFI=0.92$ ;  $NFI=0.85$ ;  $SRMR=0.081$  (RML)].

Table 7

*Cronbach's alpha reliability coefficients (N = 512)*

Scale	$\alpha$ Cronbach
Reduction of importance	0.76
Making space available	0.76
Social approval	0.49 after removal of items 15 and 17: 0.62

Table 7 shows Cronbach's alpha reliability coefficients measured for the whole sample. The reduction and availability scales are characterized by a satisfactory reliability level. They may be considered as internally consistent scales. The social approval scale achieves a low value, which proves poor reliability. Removing poor items 15 and 17 increases reliability to a moderate level. A set of items on the scales of regulation and availability (their sum) is characterized by high reliability ( $\alpha = 0.83$ ).

Summing up, both confirmatory factor analysis and reliability analysis indicated that the DEI questionnaire is pertinent and reliable, and its best application is when it is made up of two scales comprising regulation and availability. However, the lie scale results should be viewed with caution since its items may be treated as buffer values, and the result itself should be measured as a sum of items seven and nine.

## Item-item correlation

The analysis of correlation between individual test items forming the questionnaire was conducted in order to verify the cohesion of the DEI-beh scales. The results are presented in Tables 8 and 9.

Table 8

*Correlation coefficients between test items in the Reduction of importance (RI)*

	1R Agent	2R Agent	4R Agent	6R Agent	8R Agent	10R Agent	11R Agent	12R Agent	20R Agent	22R Agent	24R Agent
1R Agent	–										
2R Agent	0.48	–									
4R Agent	0.42	0.32	–								
6R Agent	0.32	0.25	0.33	–							
8R Agent	0.27	0.27	0.20	0.30	–						
10R Agent	0.18	0.18	0.13	0.14	0.39	–					
11R Agent	0.26	0.28	0.22	0.24	0.30	0.15	–				
12R Agent	0.13	0.15	0.11	0.15	0.17	0.16	0.30	–			
20R Agent	0.25	0.17	0.17	0.25	0.24	0.19	0.12	0.17	–		
22R Agent	0.15	0.22	0.17	0.12	0.20	0.12	0.24	0.30	0.09	–	
24R Agent	0.18	0.13	0.13	0.10	0.24	0.17	0.22	0.18	0.08	0.28	–

Table 8 shows the correlation coefficient values between test items included in the Reduction of Importance scale. The values of coefficients enable one to draw conclusions regarding the cohesion scale.

Table 9

*Correlation coefficients between test items in the Reduction of importance (Making Space Available) (MSA)*

	3R Agent	5R Agent	13R Agent	14R Agent	16R Agent	18R Agent	19R Agent	21R Agent	23R Agent
3R Agent	–								
5R Agent	0.18	–							
13R Agent	0.01	0.41	–						
14R Agent	0.15	0.32	0.42	–					
16R Agent	0.23	0.25	0.25	0.30	–				
18R Agent	0.28	0.33	0.18	0.28	0.23	–			
19R Agent	0.17	0.23	0.18	0.28	0.13	0.34	–		
21R Agent	0.22	0.19	0.12	0.20	0.19	0.33	0.21	–	
23R Agent	0.15	0.42	0.40	0.36	0.28	0.40	0.30	0.29	–

Table 9 presents the values of correlation coefficients between test items included in the Making Space Available scale. The results obtained enable one to confirm the scale cohesion.

## Criterion validity

Taking into account the definition of deinfluencization proposed by Kożusznik (1996, 2005, 2006), we decided to verify the tool's external validity with the temperament characteristics defined by Pavlov (1952) and selected personality traits proposed in the Five-Factor Model Personality by Costa and McCrae (1992).

Having analyzed a skill of influence regulated at both behavioral levels – convictions and cognitive abilities as well as emotions – it seemed purposeful to consider an individual's biologically motivated tendencies (including temperament), and a structure of personality developed in the socialization and education process, as the foundations enabling implementation of the individual dimensions of deinfluencization.

The tool's validity test was conducted by applying the PTS temperament questionnaire created by Strelau and Zawadzki (1998). That questionnaire is based on a typology of temperamental features, relying on the principle of nervism (Pavlov, 1952), which expresses the conviction that behavior results from individual differences in the central nervous system and in the conditioning processes that are its consequence.

The nervous system types conceived by Pavlov (1952; Strelau, Zawadzki, 1998) are created by various nervous system configurations, such as its excitatory strength, inhibitory strength, and nervous mobility.

Table 10

*Criterion validity. Correlation coefficients between DEI and temperament features*

	Strength of excitatory process	Strength of inhibitory process	Mobility of nervous processes
Deinfluencization	0.08	0.31**	0.26*

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

Tool validity was verified by determining a correlation coefficient between the general result and the results in the individual scales questionnaire, and the values achieved in individual aspects of temperament, hypothesizing that positive relations should occur between deinfluencization and the strength of the excitatory and nervous mobility processes.

Table 11

*Criterion validity. Correlation coefficients between dimensions of DEI and temperament features*

	Strength of excitatory process	Strength of inhibitory process	Mobility of nervous processes
Reduction of Importance	0.01	0.27**	0.17
Available	0.14	0.30**	0.34*

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

The underlying reason for regulating the influence both with regard to reducing one's own importance and making space available to others is the strength of the inhibitory process. It manifests itself among people as the ability to interrupt one's own behaviors, defer them and to undertake adequate actions corresponding to situational conditions, as well as refraining from behaviors and reactions (Strelau, Zawadzki, 1998). This strength is recognized as the ability to maintain a conditioned inhibition seen as extinction, delay, differentiation and conditioned inhibition viewed in its narrow sense (Pavlov, 1952), whereas its measure is the ease in evoking and maintaining such a condition for a possible time by the central nervous system. A significant correlation in this regard indicates biological predispositions to refrain from acting or exerting an impact in response to present situational conditions. A special deinfluentionization relationship with nervous mobility was expected in making space available. Since nervous mobility is the ability of the nervous system and the resulting individual's ability to quickly change behavior adequate to changing situational conditions, it may be assumed that the existing relationship confirms the adequateness hypothesis for making smaller or bigger space available to employees' activities depending upon the task or its significance for organization effectiveness.

The *NEO-FFI Questionnaire* conceived by Costa and McCrae, in the Polish adaptation made by Zawadzki, Strelau, Szczepaniak and Śliwińska (1998), was used to measure DEI-beh validity. The Five-Factor Personality Model postulated by Costa and McCrae deals with personality as a structure of the most essential dimensions able to impact traits, verified both in natural languages and also in psychological questionnaires (Costa & McCrae, 1992). It distinguishes five basic dimensions: neuroticism, extraversion, openness to experience, agreeableness and conscientiousness.

Table 12

*Criterion validity. Correlation coefficients between deinfluentionization and personality traits*

	Neuroticism	Extraversion	Openness to experience	Agreeableness	Conscientiousness
Deinfluentionization	-0.06	0.23**	0.18*	0.36***	0.24**

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

Table 13

*Criterion validity. Correlation coefficients between dimensions of deinfluentionization and personality traits*

	Neuroticism	Extraversion	Openness to experience	Agreeableness	Conscientiousness
Reduction of Importance	0.09	0.14	0.12	0.24**	0.11
Available	-0.24**	0.29***	0.21**	0.44***	0.36**

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

It has been assumed that the fundament for skill in making space available to others will be moderate relationships with all five personality traits, with emphasis being put on a negative relationship at the same level as that neuroticism. This system would justify the ability to undertake actions aimed at offering space for others to act and express themselves, while appreciating their possible contribution to tasks that are to be performed, and demonstrating consideration for interpersonal relations. Regarding the neuroticism dimension, which refers to an individual's emotional stability (Zawadzki et al., 1998), and the ease with which one may fall into experiencing states and emotions considered as negative and the tendency to persevere in them, it has been assumed that a negative relationship may be understood as confirming interpersonal significance in making space available. The remaining factors are related to authenticity and cordiality, that is, being considerate towards others and demonstrating openness to them – thus, positive relationships were found advisable. This hypothesis was borne out through correlation analysis between making space available and individual personality traits in the Big Five model.

Besides determining a skill to reduce one's own importance as an ability to withdraw oneself, to suppress one's own influence and diminish one's own value for the good of a team and the organization, it was recognized that a particular connection would occur with the agreeableness factor describing an individual's interpersonal attitude. In the case of high values, agreeableness manifests itself as sensitivity to other people's affairs (Costa & McCrae, 1992), which appears to be necessary for a moderating skill. The analyses conducted in this respect confirmed the above assumptions. Since the assumptions regarding relationships of deinfluencing with temperament and personality were demonstrated, the tool's validity and its concept, respectively, were recognized in both dimensions.

## Conclusions

The *Influence Regulation and Deinfluencing Scale (DEI-beh)* satisfies essential requirements for factor validity and reliability. This allows the DEI-beh tool to be considered useful in research studies that regulate one's own influence and importance in an organization.

The validity of differentiating two factors within the tool – reduction of influence and importance (RI) and making space available (MSA) was borne out by factor analysis.

Our research on the tool's external validity enabled us to confirm the hypotheses on the kind and strength of deinfluencing relationships with individual temperament and personality traits. Our research also revealed the relationships between making space available and the strength of inhibitory and mobility of nervous processes, and the relationships between influence reduction and importance with inhibitory strength. Deinflu-

entization with personality traits demonstrated that there is a positive relationship between reduction of importance with agreeableness, while making space available is related to extraversion, openness to experience, agreeableness, conscientiousness, and negatively related to neuroticism.

## References:

- Adamiec, M. & Kożusznik, B. (2000). *Zarządzanie zasobami ludzkimi*. Aktor, Kreator, Inspirator. [HR management. Actor, Creator, Inspirator] AKADE, Kraków.
- Bass, B.M. (2008). *Handbook of leadership. Theory, research, & managerial applications*. New York: Free Press.
- Costa, P. T., & McCrae, R. R. (1989). *The NEO-PI/NEO-FFI manual supplement*. Odessa, FL.: Psychological Assessment Resources
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- Cropley, D.H. & Cropley, A.J. (2010). Understanding the innovation-friendly institutional environment: a psychological framework. *Baltic Journal of Psychology*, vol.11, 1,2, pp. 73–87.
- Denning, P.J. (2004). The social life of innovation. *Communication of the ACM*, vol.47, 4, April.
- Drucker, P.F. (1985). The discipline of innovation. *Harvard Business Review*, vol.63, 3.
- Edelman Trust Barometer. (2015). *2015 Edelman Trust Barometer: Executive summary*. Retrieved from <http://www.edelman.com/insights/intellectual-property/2015-edelman-trust-barometer/18.01.2016>
- Emans B.J., Munduate L., Klaver E. & Van de Vliert E. (2003) Constructive Consequences of Leaders' Forcing Influence Styles. *Applied Psychology*, Vol.52, January, pp. 36–54.
- Euwema, M., Munduate, L., Elgoibar, P., Pender, E., & Belén García, A. (Eds.). (2015). *Promoting Social Dialogue in European Organizations Human Resources Management and Constructive Conflict Management*. London, New York: Springer.
- Goleman, D. (1997). *Inteligencja emocjonalna*. [Emotional intelligence] Poznań: Media Rodzina.



- Goleman, D., Boyatzis, R. & McKee, A. (2004). *Primal Leadership*, HBS Press.
- Hackman, J.R. (2002). *Leading teams: Setting the stage for great performance*. Cambridge, MA: Harvard Business Press.
- Hay Group Raport, Retrieved from [http://www.moznainaczej.com.pl/download/Konwersatoria/Rok\\_2013/Liderzy\\_w\\_zmianie\\_przywodztwo\\_transformacyjne.pdf](http://www.moznainaczej.com.pl/download/Konwersatoria/Rok_2013/Liderzy_w_zmianie_przywodztwo_transformacyjne.pdf), 18.01.2016
- Kaiser, R.B., Lindberg, J.T., & Craig, S.B. (2007). Assessing the flexibility of managers: A comparison of methods. *International Journal of Selection and Assessment*, 15, 40–55.
- Kipnis, D, Schmidt, S.M., & Wilkinson, I. (1980). Intra-organizational influence tactics: Explorations in getting one's way. *Journal of Applied Psychology*, 65, 440–452.
- Konarski, R. (2009). *Modele równań strukturalnych. Teoria i praktyka*. [Structural Equation Models. Theory and practice] Warszawa: Państwowe Wydawnictwo Naukowe.
- Kożusznik B. (1995). Work teams and organization: conscious regulation and getting rid of influence. *The Business Research Yearbook Vol. 2* University Press of America, Inc. Lanham, MD.
- Kożusznik, B. (1996). *Podmiotowość zespołu pracowniczego w organizacji*. [Individuality of Work Team in Organization]. Katowice: Wydawnictwo Uniwersytetu Śląskiego.
- Kożusznik B. (2002). *Zachowania człowieka w organizacji*. [People Behavior in Organization]. Polskie Wydawnictwo Ekonomiczne, Warszawa.
- Kożusznik B. (2004) Taktyki wpływu polskich menedżerów. In: G. Bartkowiak (Ed.). *Polskie regiony zachodnie na starcie w Unii Europejskiej*. [Influence Tactics of Polish Managers In: Polish Western Regions on the Doorstep of European Union]. Zielona Góra: Wyd. Zachodnia Szkoła Wyższa Handlu i Finansów Międzynarodowych.
- Kożusznik, B. (2005). *Wpływ społeczny w organizacji*. [Social Influence in Organization] Polish Economic Publishing, Warszawa.
- Kożusznik, B. (2006). Deinfluencization and self-monitoring as influence regulation tactics of Polish women and men managers. *Women in Management Review*, 21, 2, 131–142.
- Kożusznik, B. & Polak, B. (2015), Employee Representatives in Poland. How are they perceived and what are the expectations by employers in Poland. In: Euwema, M., Munduate, L., Elgoibar, P., Pender, E., & Belén García, A. (Eds). *Promoting Social Dialogue in European Organizations*. The Netherlands: Springer.

- Lewin, K. (1952). Group decisions and social change. In Newcomb, Th. and Hartley E.L. (Eds.) *Readings in Social Psychology*. New York: Holt, 330–334.
- Mumford, M.D., Friedrich, T.L., Caughron, J.J., & Byrne, C.L. (2007). Leader cognition in real-world settings: How do leaders think about crisis? *Leadership Quarterly*, 18, 515–543.
- Munduate, L., Euwema M. & Elgoibar P. (Eds.). (2012). *Ten Steps for Empowering Employee Representatives in the New European Industrial Relations*. Madrid: McGraw Hill.
- Murray, H. A. (1987). *Test Apercepcji Tematycznej. Podręcznik*. [Thematic Apperception Test. Manual] Warszawa: Pracownia Testów Psychologicznych PTP, wyd. 2 popr.
- Nosal, C. (2010). Dinozaury władzy. Destrukcyjne kierowanie organizacjami [Dinosaurs in power. Destructive management of organizations]. In: B. Kożusznik, M. Chrupała-Pniak (Eds.). *Zastosowania psychologii w zarządzaniu*. Katowice: Uniwersytet Śląski.
- Pawłow, I. (1952). *Dwadzieścia lat badań wyższej czynności nerwowej (zachowania się) zwierząt*. [Twenty years of research of higher nervous activity (behavior) of animals.] Warszawa PZWL.
- Pink, D. (2005). *A whole new mind: Moving from the information age to conceptual age*. New York: Amazon.
- Pratkanis, A.R. (Eds.). (2007). *The social science of social Influence. Advances and future progress*. New York: Taylor and Francis, Psychology Press.
- Riggio, R.E., Tan, S.J. (2014). *Leader interpersonal and influence skills: The soft skills of leadership*. London: Routledge.
- Schein, E. (1988). *Organizational psychology*. New York: Prentice Hall, Englewood Cliffs
- Schermelleh-Engel, K., Moosbrugger, H. & Müller, H. (2003). Evaluating the Fit of Structural Equation Models: Tests of Significance and Descriptive Goodness-of-Fit Measures, *Methods of Psychological Research Online*, 8, 23–74.
- Smith, K.K. & Berg, D.N. (1987). *Paradoxes of group life: Understanding conflict, paralysis, and movement in group dynamics*. San Francisco: New Lexington Press.
- Song, L-Y., Singh, J. & Singer, M. (1994). The Youth Self-Report Inventory: A Study of Its Measurement Fidelity. *Psychological Assessment*, 6, 236–245.

- Strelau, J. & Zawadzki, B. (1998). *Kwestionariusz temperamentu PTS: Podręcznik*. [Temperament Questionnaire (PTS) manual] Warszawa: Pracownia Testów Psychologicznych.
- Yukl, G., Lepsinger, R. & Lucia, A. (1992). Preliminary report on development and validation of the influence behavior questionnaire. In: K. Clark, M.B. Clark, & D.P. Campbell (Eds.). *Impact of leadership*. Greensboro, NC: Center for Creative Leadership, 417–427.
- Yukl, G., & Seifert, C. (2002). *Preliminary validation research on the extended version of the influence behavior questionnaire*. Poster at the Society for Industrial and Organizational Psychology meetongs, Toronto, Canada (Information was received from the author's own).
- Yukl, G. (2010). *Leadership in organization* (7th ed.). Upper Side River, New York: Prentice Hall.
- Yukl, G. & Mahsud, R. (2010). Why flexible and adaptive leadership is essential. *Consulting Psychology Journal: Practice and Research*, 62(2), 81–93.
- Zawadzki, B., Strelau, J., Szczepaniak, P. & Śliwińska, M. (2007). *Inwentarz osobowości NEO-FFI. Adaptacja polska. Podręcznik* [The Polish Adaptation of Personality Inventory (NEO-FFI) manual]. Warszawa: Pracownia Testów Psychologicznych PTP.