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## Validation of the Questionnaire of Readiness To Resist Against Social Impact : Perspective of Applications in Academic Education Contexts

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### **VALIDATION OF THE QUESTIONNAIRE OF READINESS TO RESIST AGAINST SOCIAL IMPACT. PERSPECTIVE OF APPLICATIONS IN ACADEMIC EDUCATION CONTEXTS**

**Abstract:** *The article presents the validation procedure of the questionnaire to measure individual readiness to resist against unwanted social impact. One of the aims of the research was to design a tool for use in the academic education context. The conceptualization was based on literature relating to rebelliousness, negativism, reactance, disobedience and resistance against social influence. Consequently, it has been assumed that the variable is multidimensional. Results show that the tool measures four separate types of readiness to resist. Moreover, the validity and the reliability were satisfactory. The empirical data was collected in a series of investigations on a group of 653 people.*

**Key words:** *resistance; readiness to resist; measurement; questionnaire; validation*

## **Introduction**

The aim of the conducted studies on the author's questionnaire of individual resistance against unwanted social impact<sup>1</sup> was to create a tool that could be used among adults in the context of university education, without the necessity to refer to the area of therapy or maturation, however, based on qualities mutually accented from the point of view of various theories, models and viewpoints concerning resistance towards social impact. Individual resistance can occur in every

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<sup>1</sup> The studies presented in the text are continuation of the tool construction project, the first effects of which were presented in: Sławomir Pasikowski (2014), *Ambiwalencja i opór. Nauczyciele i studenci wobec szkoły*, Wydawnictwo Naukowe AP, Słupsk.

social interaction and in any stage of human life (Apter, 1982; McDermott, 1988). The measurement of this phenomenon in the context of higher education, and in a manner possibly free from mediation with therapy and maturation, seems to be an attractive option, both in the aspect of creating models and concepts of university education and in practical diagnostic and predictive applications on this educational level. However most tools and studies are focused on the period of childhood and adolescence (McDermott, 1988; Oleszkowicz, 2001; Ostrowska, 2002; Bukobza, 2009) or issues of counseling and therapy (Seibel, Dowd, 1999; Karno, Beutler, Harwood, 2002; Arnow i in., 2003; Seemann i in., 2004; Karno, Longabaugh, 2007). The existing tools do not always possess satisfactory validity and reliability (Hong, Ostini, 1989; Dowd, Milne, Wise, 1991; Donnell, Thomas, Buboltz, 2001; Buboltz, Thomas, Donnell, 2002; Arnow et al., 2003; Shen, Dillard, 2005; Jonason, Bryan, Herrera, 2010), which encourages seeking new solutions in the scope of resistance measurement, and not merely resorting to existing tools (Jonason, Bryan, Herrera, 2010). The question which is at the base of the construction of the presented questionnaire concern the forms or means of expressing resistance towards unwanted social influence. A more exact presentation of the basis of conceptualization of the presented tool can be found elsewhere (Pasikowski, 2014a; 2014b).

Since rebelliousness and negativism are described as every hidden or open resistance toward social influence resulting from power, authority, conventions or a fostering structure of the situation (Aggleton, Whitty, 1985; McDermott, 1988), individual assessment of one's reaction to experienced social impact seems to be an important issue, especially in the context of passive resistance (McDermott, 1988). Consequently, the following set of statements derived as a result of operationalization, also includes ones concerning behaviors, which do not necessarily have to be perceived as expressions of resistance. It is only the context of the perception of conditions and one's attitude towards a situation, that determines negative overtones of these reactions. This phenomenological nature of resistance justifies and favors measuring techniques based on self-observation and self-description (McDermott, 1988).

Relying in this context on the positions of other authors concerning issues of negativism, rebelliousness, resistance and disobedience (Brehm, 1966; Porebska, 1968; Brehm, Brehm, 1981; Apter, 1982; Oleszkowicz, 2006) resistance was perceived, during the construction of the questionnaire, as a function of interpretation of a particular social situation and subjective inner experience. Thus it is justified to speak of readiness to resist unwanted social influence and restrictions (cf. McDermott, 2001; Knowles, Riner, 2007). This readiness should be understood as a conscious mental attitude in which the subject, disaffected with external

impact and perceiving himself/herself as opposed to this impact, is able to take immediate action directed at reducing its influence (cf. Apter, 1982; Apter, 2001a; 2001b; McDermott, 2001; Oleszkowicz, 2006).

The findings of previous studies (McDermott, 1988; Dowd, Milne, Wise, 1991; Stenner, Marshall, 1995; Donnell, Thomas, Buboltz, 2001; Buboltz, Thomas, Donnell, 2002; Arnow i in., 2003; Shen, Dillard, 2005; Bukobza, 2009; Rudnicki, 2009; Jonason, Bryan, Herrera, 2010) justify the assumption, in the stage of tool conceptualization, that resistance is a multidimensional phenomenon. That is why I have distinguished four types of resistance. The starting point for formulating the position supporting the four-factor model of resistance was the thesis, that resistance itself can be characterized by two more general properties. The first one is activeness, i.e. the degree to which a given position is insisted upon or defended (from passive to active forms; cf. Obuchowska, 1983; Aggleton, Whity, 1985; Fernandes, 1988; Porębska, 1966; Paleczny, 1997; Thomas, Donnel, Buboltz, 2001; Goffman, 2006; Oleszkowicz, 2006; Knowles, Riner, 2007; Zimbardo, 2008). The second is acceptance – the degree to which an individual acknowledges the source of experienced leverage and restrictions, in the sense that he/she is oriented towards building or maintaining social relations (cf. Obuchowska, 1983; Sztompka, 2003). This property is not taken into consideration in the practice of constructing resistance measuring tools. Instead the focus is usually on the consciousness and purposefulness of individual and environmental behavior (Oleszkowicz, 2001; Bukobza, 2009), the expression of opposition (Dowd, Milne, Wise, 1991; Oleszkowicz, 2001), the intensity of the need for independence (Tucker, Byers, 1987; Dowd, Milne, Wise, 1991; Hong, Faed, 1996; Stanik, Roszkowska, Kucharewicz, 2006), the strategy of coping with limitations (Ostrowska, 2002), the status of those within the relation, proactive vs. reactive behavior (McDermott, 1988; Bukobza, 2009), the degree of externalization, and the outcome of those behaviors, including advantages and benefits for the individual and the environment (Stenner, Marshall, 1995; Oleszkowicz, 2001; Bukobza, 2009). Thus, taking into account the issue of “acceptance”, according to the provided definition, seems to be not only theoretically justified, but also interesting, because it was previously underestimated in the practice of constructing resistance measuring tools.

An additional justification for the two primary characteristics of resistance is the model which assumes the existence of a continuum of behaviors in response to social influence, perceived by the individual as a threat to his/her liberty: from submissive, to assertive and finally aggressive forms (Deluty, 1979; Ames, 2007; Ames, Flynn, 2007). Additional arguments, especially in favor of “acceptance”, are provided by the ingratiation theory (Jones, Wortman, 1973, after: DeLamater, Myers, 2011), particularly two types of behavior it describes. The first one con-

sists in presenting conformity with others' opinions and convictions. The other is a self-presentation aimed at increasing attractiveness in the eyes of others, e.g. through presenting or describing one's properties in a way that meets others' expectations or agrees with others' preferences. According to this theory the control of others' impressions of one, through expressing humility, dependence, and submissiveness towards external demands and pressure, tends to be used as camouflage and serves purposes opposite to those which are in the interest of the recipients of such action. These actions are aimed at gaining access to certain benefits or protecting a certain *status quo*, and are treated as interpersonal techniques of exerting influence (Bohra, Pandey, 1984; Gordon, 1996; Blickle, 2003; Ellis, West, Ryan, DeShon, 2002). They can also be interpreted as means of reducing the degree of one's dependence on others (Baumeister, 1982). However, they are definitely more related to maintaining than severing relations.

## Method

### *Tools*

Based on the system resulting from the orthogonal arrangement of the "activeness" and "acceptance" categories, I assumed that resistance can be expressed in four separate forms: expression of negative emotions and aggression, passivity, ostensible adaptation, and assertive expression of one's standpoint. The first form would be connected with a direct and active defense of one's position, with a low level of acceptance and care for the relation. It would consist in a directed expression of anger and hostility and in taking action which is contrary or damaging to the interests of those exerting pressure. I called this form retaliation (Rt). The other, consisting in passivity resulting from an aversion to the experienced pressure and demands, would be connected with a low level of direct active defense and exerting one's position, as well as a low disposition towards relation. I called this form passive resistance or inertia (In). It would be expressed through limiting contact, withdrawal, avoidance, negation and rejection of action, possibly connected with a disdainful attitude towards the ones' exerting pressure of the situation of pressure (cf. Porebska, 1968; Apter, 1982; Knowles, Riner, 2007). Apparent adaptation, called opportunism (O), is the third form of resistance. It would be characterized by an orientation towards relation and a low level of active defense (cf. Obuchowska, 1983; Sztompka, 2003). Opportunism would be expressed through the instrumental creation of an impression of submissiveness, which enables the secret realization of one's goals or the minimization of possible losses connected with open confrontation. The thord form is assertive confrontation (Ac). It would be connected with direct active defense, exerting one's position, and

at the same time with an orientation towards building a relation. It would consist in open communication of one's disagreement, and with seeking arguments which enable a change in the situation, while respecting the rights of the other side.

On this basis the initial pool of 80 items for the readiness to resist questionnaire (pol. *Kwestionariusz Gotowości Przeciwstawiania się* – KGP) was created, with 20 items per each distinguished type of resistance. Linguistic correctness was ensured by a philologist, who modified the statements to make them both correct and simple. The statements only concerned behaviors. I did not refer to hypothetical situations – a typical feature of questionnaires. I tried to focus the attention of the respondents on the occurrence of specific behaviors, recognized on the basis of social experiences recreated in their memories. Specific situations described in particular statements of the questionnaire may not have happened to the respondents, thus inclining them to virtually place themselves in given circumstances. That is why, following the suggestion of Paul Stenner and Harriette Marshall (1995) concerning the value of reducing directivity in studies on resistance, the instruction suggests a specific group of experiences and situations which are by assumption common to various people. Therefore the respondent's task is to search his/her memory for examples of specific behaviors and to determine the frequency of their occurrence in response to situations indicated in the instructions. However, using "prompts" in particular statements, suggesting the type of situations, clearly directs the respondents. In source literature we can find evidence of the significance of the type of threat to one's sense of liberty for the effect of resistance. Yet this evidence is not unambiguous. Ultimately, some researchers agree that every threat to freedom and liberty triggers motivation to restoring them (Seemann, Carroll, Woodard, Mueller, 2008). Diverse forms of these threats may cause differences in the intensity of resistance, although individual sensitivity towards such threats is also important. Despite the ambiguity of the evidence I accepted a solution consisting in indicating the diversity of the threats to freedom and liberty in the instruction. This decision was supported by the finding that every threat to freedom results in motivation to regain it. Since this is the case, renouncement of situation descriptions in particular items of the questionnaire should not significantly affect the tool's validity or reliability.

The instruction includes the following statement: "Describe how you act when you feel that someone is confining you or trying to influence you by, for example, limiting your choices, advising, ordering, restricting or formulating demands and expectations, with which you disagree partially or entirely". The instruction also requires that respondents characterize these behaviors by referring to various everyday situations which they experience at work, at school, at home, among acquaintances, among friends or simply among people. At the end respondents are

asked to answer each statement by circling one chosen point on a 7-point frequency scale, from *never* (1) to *nearly always* (7). The points are divided by hyphens; setting the scale between *never* and *almost always* was to create an impression that it constitutes a continuum.

The 7-point solution, similarly to 5-point and 9-point scales, is an optimal one in the case of measurements (Brzezińska, Brzeziński, 2006). It provides a spectrum of choices without creating confusion with too many possibilities. Moreover, in a situation where access to information connected with traits is easy enough, and is accompanied by experience connected with given traits, 7-point scales seem better at diversifying respondents in terms of the answers they provide. They also produce better results in the scope of conformity of people with similar intensity of given traits.

In order to determine the convergent and divergent validity of the readiness to resist questionnaire I used the results collected from: Kwestionariusz Kompetencji Społecznych (KKS) (*Social Competence Questionnaire*) by Anna Matczak, the Therapeutic Reactance Scale (TRS) by Thomas E. Dowd, Christopher R. Milne and Steven L. Wise, in the Polish adaptation by Seweryn Rudnicki, the compliance scale of the NEO-FFI personality inventory, in the Polish adaptation by Bogdan Zawadzki, Jan Strelau, Piotr Szczepaniak and Magdalena Śliwińska, the I-E Scale by Julian Rotter, the Beck Depression Inventory (BDI) by Aaron Beck, and the State-Trait Anxiety Inventory (STAI), adapted by Charles Spielberg, Jan Strelau, M. Tysarczyk and Kazimierz Wrześniewski.

### ***Respondents and Study Design***

The KGP, as described above, was distributed to 248 people (165 women and 83 men). The average age was 27 ( $m = 26.75$ ;  $sd = 13.05$ ; median = 24). Based on the collected results the initial assessment of the test's factor structure was performed. The second stage consisted in determining the best solutions in the scope of questionnaire structure. In the third stage – the second analysis of the test's inner structure – the new version of the KGP questionnaire, resulting from the previous stages, was distributed to 204 respondents (125 women and 79 men). The average age of the respondents was 23 ( $m = 22.79$ ;  $sd = 5.25$ ; median = 21). Both groups of respondents were comprised of full-time and part-time students of the Pomeranian University in Słupsk (AP), studying such courses as: pedagogy, medical rescue, defense policy, public security, Polish philology and history. The students groups were units of sampling and they were selected to sample according to one-stage cluster random sampling.

The study project also foresaw checking the convergent and divergent validity of the KGP. For this purpose another group of 165 people (78 women, 87 men;



age:  $m = 23.01$ ;  $sd = 3.36$ ; median = 22) – students of such courses as: pedagogy, medical rescue, defense policy, public security – were asked to fill in the questionnaire. The distributed sets included the KGP (20 items), together with: the Social Competence Questionnaire (KKS) by Anna Matczak (37 people), the Therapeutic Reactance Scale (TRS) by Thomas E. Dowd, Christopher R. Milne and Steven L. Wise, in the Polish adaptation by Seweryn Rudnicki and the compliance scale of the NEO-FFI personality inventory, in the Polish adaptation by Bogdan Zawadzki, Jan Strelau, Piotr Szczepaniak and Magdalena Śliwińska (53 people), the I-E Scale by Julian Rotter (37 people), the Beck Depression Inventory (BDI) by Aaron Beck and the State-Trait Anxiety Inventory (STAI), adapted by Charles Spielberg, Jan Strelau, M. Tysarczyk and Kazimierz Wrześniewski (38 people). In each set the KGP was filled in first.

In order to determine the stability of the test a separate group of 98 people (79 women, 19 men; age:  $m = 28.71$ ;  $sd = 5.64$ ; median = 27), all students of the Pomeranian University in Słupsk, studying pedagogy and social work, filled in the questionnaire twice over an interval of three weeks. Participation in the study was voluntary, anonymous and without time restrictions.

## **Psychometric Properties Analysis Results**

### ***Factor Validity and Reliability***

Initially confirmatory factor analysis was used to analyze the gathered material. Satisfactory confirmation (statistical significance if chi square) could not be obtained, although the direction of the theoretical assumptions was not entirely erroneous, which is shown by the acceptable value of the adjustment factor RMSEA (table 1).

However, due to unsatisfactory results, the gathered material underwent further analysis, this time without anticipating the result structure model. For this purpose I used exploratory factor analysis.

In the case of the initial pool of test items factor analysis was justified, which was indicated by a satisfactory correlation coefficient (KMO) and a statistically significant result of the Bartlett test (table 2) – evidence that correlations in the result matrix were clearly above zero. In the analysis carried out using the standard method of orthogonal rotation (Varimax) I assumed the existence of four factors, despite results provided by confirmatory factor analysis. This number was indicated by the Cattell test. Although analysis indicated 20 factors with a value above 1 (according to the Kaiser criterion), the collapse of the eigenvalue curve took place after the first four factors (eigenvalues of the first four factors: I = 10.92; II = 7.94; III = 4.88; IV = 3.98). Ultimately this number best described the structure of the



collected results. Item reduction was conducted based on their discriminating power and the factor load value. In the end items with a discrimination value below 0.35, a load above 0.45, and correlating with more than one factor, were disqualified. This concerned 60 statements.

Satisfyingly high KMO coefficients and the Bartlett test result (table 2) for the set of test items reduced to 20 (table 3) became the basis for another Varimax factor analysis. It turned out that the statements in the questionnaire relate, as before, to four factors. Although the eigenvalues of these factors were significantly lower (I = 4.24; II = 3.44; III = 1.93; IV = 1.88), they were still above the threshold according to Kaiser's criterion. Cattell's test still indicated that this number was optimal. Factors one (Rt) and two (Ac) received 6 items, the third factor (O) received 5 items and the fourth factor (In) received 3 items. It needs to be stressed that none of these items matched any other factor than the one it was originally designed for. The test explained over 57% of the result variance – 21% for the first factor, 17% for the second, nearly 10% for the third factor and 9% for the fourth factor. Discriminating power of the test items fell below 0.38 in just one case. Discriminating power values for the rest of the items remained between 0.41 – 0.77. Inner value (measured the Cronbach  $\alpha$  coefficient) for the entire questionnaire equaled 0.75, and the value Spearman-Borwn coefficient equaled 0.64. The inner consistency of the Rt scale (1<sup>st</sup> factor) equaled 0.87, the Ac scale (2<sup>nd</sup> factor) – 0.84, the O scale (third factor) – a little over 0.70, and the In scale (fourth factor) – 0.698. Inter-correlations between general scale results, obtained through factor analysis, were close to zero and statistically insignificant, apart from the coefficient of the relation between the O and Rt scales ( $r = 0.29$ ,  $p < 0.001$ ).

In order to once again test the inner structures of the new questionnaire, consisting of 20 items and established in the second stage of the study, I prepared a study, which included 204 people (125 women, 79 men). Analysis of the results in terms of correlations between the items of the test, as a basis for using factor analysis, was successful both with regard to the KMO indicator and to Bartlett's test (table 2). After conducting exploratory factor analysis using the Varimax method, it turned out that the factor load value remained at a similar level, with the four-factor structure maintained. The earlier decision concerning the number of factors was made, as before, based on the Cattell test and Kaiser's criterion (eigenvalues of distinguished factors: I = 3.83; II = 3.49; III = 2.45; IV = 1.64). In total the test explained nearly 58% of the result variance – similarly to the previous version. The first factor explained over 19.39 % of result variance, the second – over 17.46 %, the third – over 12.25 %, and the fourth – over 8.18 %. Discriminating power of the test items did not change significantly. It oscillated, depending on the set of items corresponding with specific factors, in the range between 0.41 – 0.72.

Inner consistency of the entire questionnaire, measured using the Cronbach  $\alpha$  coefficient, equaled 0.73 while the of the Spearman-Brown coefficient equaled 0.77. The inner consistency of the Rt scale (first factor) equaled 0.83, the Ac scale (second factor) – 0.80, the O scale (third factor) – 0.76 and the In scale (fourth factor) – 0.71. We need to add that in the third stage of the study inter-correlations of general scale results were close to zero and statistically insignificant, apart from the coefficient of the relation between the O and the In scales ( $r = 0.29, p < 0.001$ ). Worth to noting is also a right-skewed distribution of results for the Rt scale and left-skewed distribution of results for the Ac scale. This means, that in the case of the first can be expected more results lower than the arithmetic mean for the scale, and in the case of the latter more results greater than the arithmetic mean of scale.

This means that the test properties obtained earlier in the analysis conducted on a reduced number of items were confirmed. A comparison of the results of the factor analysis conducted in the second and third stage of the study can be found in table 4.

I also included a study of the absolute stability of the KGP. Reliability, measured using the test-retest correlation method at an interval of three weeks, equaled  $r_{(93)} = 0.68, p < 0.001$  for the entire questionnaire. The assumption concerning parallel means in measurements using this method (Jankowski, Zajenkowski, 2009) was confirmed:  $t_{(92)} = 1.36, p = 0.176$ . In the case of individual scales correlation coefficients between two measurements conducted at different times equaled: Rt  $r_{(93)} = 0.78, p < 0.001$ ; Ac  $r_{(93)} = 0.76, p < 0.001$ ; O  $r_{(93)} = 0.67, p < 0.001$ ; In  $r_{(93)} = 0.48, p < 0.001$ . For each analysis the assumption concerning parallel means was confirmed.

### ***Convergent and Divergent Validity***

Apart from factor analysis the validity of the KGP, in its final version, was also measured in its convergent and divergent aspect. In the first case I predicted the occurrence of positive relationships between the results reactance measurements and the results of the KGP, which was confirmed in the course of conducted analyses. The total TSR result remained related to the KGP results obtained for the Rt scale ( $r_{(50)} = 0.48, p < 0.001$ ), the Ac scale ( $r_{(49)} = 0.38, p = 0.007$ ), and the O scale ( $r_{(50)} = 0.39, p = 0.005$ ). Behavioral reactance correlated with the results of the Rt scale ( $r_{(50)} = 0.48, p < 0.001$ ), the Ac scale ( $r_{(49)} = 0.29, p = 0.043$ ), the O scale ( $r_{(50)} = 0.36, p = 0.009$ ), and the In scale ( $r_{(50)} = 0.37, p = 0.008$ ). Verbal reactance correlated with the results of the Rt scale ( $r_{(49)} = 0.31, p = 0.028$ ), and the Ac scale ( $r_{(51)} = 0.38, p = 0.005$ ). Linear correlation coefficients of the other sets were statistically insignificant.

Since resistance against the influence of others may require certain social skills, I expected that at least the Ac results will be correlated with the overall result of KKS scale by Matczak. This assumption was confirmed ( $r_{(36)} = 0.61$ ,  $p < 0.001$ ) – the correlation of the Ac results with the results in the assertiveness scale of the KKS equaled:  $r_{(35)} = 0.44$ ,  $p = 0.008$ ; with the intimacy scale of the KKS:  $r_{(36)} = 0.59$ ,  $p < 0.001$ ; and with the social exposure scale of the KKS:  $r_{(35)} = 0.42$ ,  $p = 0.016$ . Correlation coefficients of other KGP scales with the KKS results were statistically insignificant.

In the case of control placement is seemed justified to assume that the Ac scale results would correlate positively with the internal locus of control (due to connections with taking initiative), while results in the In and O scales would correlate negatively. The conducted analysis indicated that the higher the KGP result, the lower the I-E result in the scope of internal control locus ( $r_{(35)} = -0.37$ ,  $p = 0.031$ ). However, predictions connected with the Ac and O scales were not confirmed. Correlation coefficients in this case were statistically insignificant.

I also made the assumption, supported by other authors' analyses, that the KGP result would remain in a negative relationship with the intensity of compliance (U), measured using the NEO-FFI Personality Inventory. For example, Eric A. Seeman, Walter C. Buboltz et al. (2005), correlated the total TSR result with the result in the compliance scale (U), and received the coefficient  $r = -0.47$ ,  $p < 0.01$ . The correlation of the results in the U scale with the general results in the KGP scale also turned out negative and statistically significant  $r_{(51)} = -0.46$ ,  $p < 0.001$ . Moreover, the measurement in the Rt scale correlated negatively with the U scale ( $r_{(52)} = -0.50$ ,  $p < 0.001$ ).

Convergent validity of the KGP scale is also supported by the fact that the overall result obtained using this tool was clearly related to the combined result of the TRS ( $r_{(50)} = 0.58$ ,  $p < 0.001$ ), the value of the measurement using the TRS behavioral reactance subscale ( $r_{(51)} = 0.58$ ,  $p < 0.001$ ), the TRS verbal reactance subscale ( $r_{(49)} = 0.37$ ,  $p = 0.009$ ) and with the overall result of the KKS ( $r_{(35)} = 0.47$ ,  $p = 0.005$ ), as well as, separately, in the assertiveness scale of the KKS ( $r_{(35)} = 0.59$ ,  $p < 0.001$ ).

In the case of divergent validity of the KGP I assumed that there would be no relationship between the results in its individual scales and the ISCL scale, and that was the case. No linear correlation coefficient, with  $n=38$ , was statistically significant, while values for  $p$  ranged between 0.1–0.8. A similar result was obtained in the analysis of the correlation of the KGP results with the BDI scale measurement, apart from the correlation coefficient for the O scale, which equaled  $r_{(35)} = 0.30$ ,  $p = 0.077$ .

## Discussion

As a result of the conducted analyses it was possible to determine that resistance, understood as readiness to resist unwanted social impact, can be considered as a multidimensional construct which can be described using four factors. This result clearly corresponds with the assumptions made by the above mentioned authors, who studied the issues of reactance, negativism and rebelliousness, which are related and similarly operationalized properties. This can indicate, despite the different meaning of obtained factors, a general regularity connected with resistance, which consists in its heterogeneity.

The similarity of the results in the second and third stage of the study confirms factor stability and reliability of the KGP questionnaire. An additional argument is that the four-factor structure and an adequately high scale reliability were sustained despite differences in terms of age and gender proportion between the first and second group of respondents. However, in order to gain certainty on this issue, further samples should be studied.

The KGP questionnaire's validity is not only confirmed by factor analysis results but also by the results of correlation analyses between tests. However, the result being on a statistical tendency level, it would be advisable to retest divergence between measurements using the O scale of the KGP and measurements using Rotter's I-E scale.

A more pronounced disadvantage of the presented studies is that in the course of analyses the In scale was deprived of items which referred to other important traits of passive resistance, taken into account in the initially assumed theoretical model. Because of this the scope of possible references of this scale may become somewhat broader, effectively including not only inertial forms of resistance, but also avoidance, which can result from a strategy or style of coping with stress. In light of the cited source literature, all behaviors and reactions (including diverting attention) can be treated as resistance if applied intentionally in order to limit external social impact. Also in favor of the In scale is the fact that the results obtained in it turned out to correlate with the results of the TSR behavioral reactance subscale. Nevertheless, content validity of the In scale may remain wanting, due to the inability of excluding other motivation for behavior in the face of unwanted social impact than dislike. An additional argument in favor of maintaining the In scale containing these specific items, is (apart from the parameters obtained through analyses) the instruction content, and the context created by the items of the other scales, referring more clearly to the measured quality.

The In scale also displays the weakest absolute stability of all KGP scales. This can be a result of the small number of items in the scale. It is also indisputable that the readiness to resist, being a dynamic and contextual phenomenon, can be subject to more explicit fluctuation than variables of a more disposable character (cf. Stenner, Marshall, 1995; Oleszkowicz, 2001).

Another limitation concerning all KGP scales is a lack of systemic control of criterion validity, which concerns each scale. An optimal solution would be to use contrast groups with four criterion groups. Each criterion group would respond to one distinguished factor. However, it is extremely difficult to create such groups without some form of measurement. A less demanding solution is to develop an experiment with manipulating social pressure exerted on individuals. It is the next, separate objective in the work on developing the presented tool.

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Table 1. A presentation of indicators of matching effectiveness for the four-factor model of readiness to resist. Initial version of the questionnaire

| chi <sup>2</sup> | df   | p      | RMSEA | GFI   | AGFI  | Gamma | Corrected Gamma | AIC   |
|------------------|------|--------|-------|-------|-------|-------|-----------------|-------|
| 6473,28          | 3080 | 0,0000 | 0,084 | 0,516 | 0,491 | 0,646 | 0,628           | 34,48 |

Source: own compilation.

Table 2. Characteristics of the matrixes of test item correlation

| stage        | KMO  | Bartlett | df   | p      |
|--------------|------|----------|------|--------|
| 1 (80 items) | 0,79 | 8962,69  | 3160 | 0,0000 |
| 2 (20 items) | 0,81 | 1705,12  | 190  | 0,0000 |
| 3 (20 items) | 0,78 | 1383,00  | 190  | 0,000  |

Source: own compilation.

Table 3. Content of the questionnaire of readiness to resist social impact.

| Item* | Content   |
|-------|---|
| 1     | I speak openly about what I dislike.  |
| 5     | I give reasons for not agreeing to a given situation.   |
| 13    | I present my objections directly to the other person and listen to his/her arguments.             |
| 16    | I expect profits from accepting his/her expectations and actions.                                 |
| 22    | I am outspoken in my arguments.   |
| 32    | I focus on other issues, not connected with the situation.  |
| 34    | I take revenge.   |
| 37    | I comply because I think about the resulting benefits.  |
| 38    | I look for something that I can use against that person at any moment.                            |
| 40    | I speak with the other person on that issue face to face.   |
| 41    | I act in spite of the other person.   |
| 42    | I try to make a good impression on the other person, even though I do not accept his/her demands. |
| 47    | I calculate the potential benefits from accepting this situation.                                 |
| 52    | I try to divert my attention from this situation and focus on something else.                     |
| 55    | I act out of spite towards that person.   |
| 63    | I try not to think about that situation.  |
| 66    | I try to repay that person, to get back at him/her.   |
| 69    | From this moment on I will be defiant and provocative towards that person.                        |
| 74    | I try to prove that it should not be this way.  |
| 79    | I try to make an impression that I agree with this situation.                                     |

\* number of item in the initial set of 80 items.

Source: own compilation.

Table 4. Factor load values obtained through exploratory factor analysis for 20 items of the questionnaire. Results for the second and third stage.

| Item*   | Stage 2      |              |              |              | Stage 3      |              |              |              |
|---------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|         | Factor I     | Factor II    | Factor III   | Factor IV    | Factor I     | Factor II    | Factor III   | Factor IV    |
| 2 (41)* | <b>0,784</b> | 0,025        | 0,049        | 0,085        | <b>0,705</b> | 0,019        | -0,069       | -0,114       |
| 5 (38)  | <b>0,724</b> | 0,008        | 0,176        | -0,051       | <b>0,492</b> | 0,076        | 0,348        | -0,142       |
| 10 (55) | <b>0,837</b> | -0,022       | 0,157        | -0,033       | <b>0,863</b> | -0,045       | -0,002       | -0,092       |
| 12 (69) | <b>0,75</b>  | -0,008       | -0,031       | 0,111        | <b>0,695</b> | 0,006        | 0,051        | 0,202        |
| 16 (66) | <b>0,804</b> | -0,017       | 0,127        | 0,027        | <b>0,812</b> | 0,094        | 0,119        | 0,035        |
| 19 (34) | <b>0,745</b> | 0,007        | 0,12         | 0,043        | <b>0,799</b> | -0,032       | 0,091        | 0,114        |
| 1 (5)   | -0,022       | <b>0,745</b> | -0,067       | -0,033       | -0,065       | <b>0,598</b> | 0,128        | 0,167        |
| 6 (22)  | -0,016       | <b>0,747</b> | -0,112       | 0,092        | 0,159        | <b>0,703</b> | -0,225       | -0,017       |
| 8 (40)  | -0,035       | <b>0,752</b> | 0,095        | 0,067        | -0,055       | <b>0,675</b> | 0,049        | -0,117       |
| 9 (74)  | 0,103        | <b>0,642</b> | 0,051        | 0,026        | 0,099        | <b>0,646</b> | 0,158        | -0,250       |
| 15 (1)  | 0,036        | <b>0,771</b> | -0,103       | 0,045        | 0,057        | <b>0,817</b> | -0,176       | 0,009        |
| 18 (13) | -0,087       | <b>0,787</b> | -0,032       | -0,12        | -0,047       | <b>0,796</b> | -0,126       | -0,092       |
| 4 (47)  | 0,266        | 0,104        | <b>0,636</b> | 0,057        | 0,065        | 0,017        | <b>0,666</b> | 0,005        |
| 7 (79)  | 0,188        | -0,149       | <b>0,561</b> | 0,14         | 0,000        | -0,199       | <b>0,613</b> | 0,358        |
| 13 (37) | 0,103        | -0,098       | <b>0,746</b> | 0,01         | 0,042        | -0,099       | <b>0,785</b> | 0,134        |
| 17 (16) | 0,138        | 0,155        | <b>0,727</b> | -0,123       | 0,240        | 0,074        | <b>0,776</b> | -0,008       |
| 20 (42) | -0,099       | -0,119       | <b>0,638</b> | 0,027        | -0,039       | -0,023       | <b>0,654</b> | 0,221        |
| 3 (63)  | -0,044       | 0,143        | 0,028        | <b>0,745</b> | -0,018       | -0,060       | 0,192        | <b>0,587</b> |
| 11 (52) | 0,117        | 0,053        | 0,051        | <b>0,835</b> | -0,003       | -0,097       | 0,050        | <b>0,827</b> |
| 14 (32) | 0,069        | -0,119       | 0,011        | <b>0,764</b> | 0,073        | 0,003        | 0,142        | <b>0,840</b> |

\* number of item in the initial set of 80 items.

Source: own compilation.

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