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TRAPS OF PSYCHOLOGICAL DIAGNOSIS ON THE EXAMPLE OF THE BARNUM EFFECT AND THE SO-CALLED SYNDROME OF ADULT CHILDREN FROM DYSFUNCTIONAL FAMILIES[1]

Abstract

The notion of *adult children of dysfunctional families* has been present for several years in psychological and self-help literature. It arouses controversy due to ambiguity of its definition and unclear diagnosis criteria. The author has attempted to verify empirically the so-called ACDFs (adult children of dysfunctional families) control list, treated as a diagnostic tool. The second research aim is the verification of Barnum effect in Polish circumstances, the psychological mechanism which can crucially distort diagnostic conduct. The survey done showed the lack of diagnostic usefulness of most of the ideas connected with the so-called ACDFs control list, the larger part of which has a non-specific, that is of Barnum.

Keywords: psychological diagnosis, the Barnum effect, ACOA (adult children of alcoholic families), ACDF (adult children of dysfunctional families)

1. Introduction

1.1 The Status of Nosological Units and Psychological Practice

Therapists, who are close to suffering and help-seeking persons, are often the first to notice psychological mechanisms that have not been described before. As a result, descriptions and demands for the introduction of new disorders or diseases are often generated from the area of therapeutic practice. Each disease unit requires a precise description of causes, specific symptoms and treatment options. Particularly important is the characteristics of the symptoms, and their uniqueness and repeatability must be indicated. This is not an easy task, and science with its methodology and "hard" tools

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provides assistance. However, therapeutic descriptions are not always scientifically verified according to the intentions of the authors, which gives rise to understandable discussions and disputes. An example of this is the controversy that has arisen in the area of research into dysfunctional families, especially alcoholic ones.

Looking at alcoholic families through the prism of systemic theory has, in the last 30 years, generated a description of several new psychological mechanisms. At the same time, mainly as a result of the activity of the self-help movement, concepts of new nosological units have emerged, concerning both the description of personality and types of stress. This refers primarily to the so-called co-dependency and the so-called adult children of alcoholics syndrome[2]. Cermak (1986, 1991) claimed that co-dependency is both a trait and a personality disorder, and developed the criteria of the phenomenon in line with the approach used in the DSM-III classification. The emerging descriptions were followed by postulates to include the so-called co-dependency into the classification of mental illness and disorders. Cermak's postulates have not been implemented and the so-called co-dependency is not included in either the DSM-IV or the ICD-10. The main reasons why it was not listed in the official classifications include the difficulty of defining the concepts cited unambiguously.

Similar difficulties occurred in the descriptions of the so-called adult children of alcoholics (ACOA). This term refers to adults who grew up in alcoholic families. Observations from the self-help movement indicated that such individuals experience several adaptation difficulties, inhibitions and fears in adulthood, the sources of which are associated with the specificity of growing up in dysfunctional alcoholic families, with the norms that prevail there, the psychological roles undertaken, communication disorders, etc. Similar as in the case of co-dependency. Cermak postulated the introduction of the personality described as ACOA syndrome as a spontaneous personality disorder into the revised versions of DSM-IV and ICD-10, however, this proposal was also rejected. In the descriptions undertaken by authors such as Woititz (1992), Wegscheider-Cruse (2000), Bradshaw (1994), Cermak and Rutzky (1996), several dozen (*sic!*) personality traits are associated with the so-called ACOA syndrome, which has been subjected to justified criticism. According to Burk and Sher (1988), the label of an adult child of an alcoholic, at the level of self-help literature, represents a plethora of dysfunctional and pathological traits, while studies indicate that most children from alcoholic families seem to function fairly normally (when a norm is understood to mean behaviour that is typical of a given society). Lilienfeld, Lynn, Ruscio, and Beyerstein (2011) have even classified the so-called adult children of alcoholics syndrome as one of the

[2] A brief commentary on the spelling of the main terms used in the text. Most of the literature to date uses the terms *co-dependency*, *adult children from alcoholic families*, *adult children from dysfunctional families*. The spelling of abbreviations in capital letters imposed by the rules of language (both Polish and English), suggests that we are dealing here with fully-fledged nosological units, contrary to scientific findings or the ICD-10 and DSM-IV classifications. All these terms should be preceded by the term *so-called* and should be written in small letters. However, to use such consistent spelling would have been very inconvenient, which is why it has been decided to use the following abbreviations throughout the text: ACOA and ACDF. They will always be preceded by the term *so-called* to emphasise their stipulated nature.

myths of modern popular psychology. Despite the fundamental difficulties with definitions and diverse results of empirical research, both the concepts of the so-called co-dependency and the so-called ACOA within addiction treatment and self-help movement have the status of fully-fledged disease units. Therapeutic groups are operating under those names in these facilities that are a tangible example of the discrepancy between scientific theory and psychological practice. A new concept of the so-called adult children from dysfunctional families (abbreviated in the literature as ACDF), which is used to refer to individuals growing up in families with various dysfunctions, other than alcoholism (structural poverty and unemployment, chronic illnesses, gambling, violence, etc.), and experiencing various difficulties in adult life, has emerged from this therapeutic and self-help current in recent years.

Studies presented in the text have verified diagnostic indicators combined with the so-called ACDF syndrome and Barnum statements. In general, the same checklist, that is a set of statements concerning different clinical symptoms, is used for the diagnosis of both the so-called ACOA and the so-called ACDF. However, for the second application, the alcoholic background in the statements has been replaced by a description of pathological mechanisms on a general level. The problem lies in the fact that these checklists (used both for the so-called ACOA and for the so-called ACDF) are not standardised psychological tools, and their psychometric properties regarding reliability and accuracy are unknown. Their usefulness in clinical diagnosis seems to vary greatly. For the clinical psychologist, some indicators may be useful in the process of establishing an individual diagnosis, but some seem excessively ambiguous, with the infamous "Barnum" qualities. This observation inspired the exploratory research referred to herein. Since the mechanism known as the *Barnum effect* is relatively poorly known, it will be described below.

2. Barnum Effect

This phenomenon was first described by Forer (1949), then by Meehl (1956). It is based on the observation that people accept certain descriptions of personality as relevant to themselves, whereas in reality, these are general, vague descriptions, often of double meaning, but linked to socially desirable characteristics that are therefore difficult to reject, thereby making them universally accepted. The term Barnum effect (other terms: *Forer effect* or *horoscopic effect*) refers to the figure of Phineas Taylor Barnum, the famous 19th-century American showman, organiser of famous exhibitions with individuals deformed by various developmental abnormalities, creator of the concept of a travelling circus, famous for his unconventional advertising ideas, in which he often resorted to bluff and mystification. P. T. Barnum was guided by the principle that every customer should find something to suit their taste. The Barnum effect is intensified when the person concerned is convinced that the analyses have been prepared especially for him/her, they come from authoritative sources, and when mainly positive features are emphasised. The so-called Barnum statements are ambiguous characterisations; a classic set of these statements includes the sentences contained in Appendix B. Such sentence structures are often used for horoscopes, hence the term horoscopic effect. In other words, Barnum statements are unspecific and therefore could apply to almost anyone.

The issue of the impact of the Barnum effect on psychological diagnosis has often been addressed in numerous studies by Western authors, which, for lack of space, are not discussed further in this article (Green, 1982; Handelsman & McLain, 1988; Beins, 1993; MacDonald & Standing, 2002; Wyman & Vyse, 2008; Christman, Hennig, Geers, Propper, & Niebauer, 2008). In Polish literature, the Barnum effect was probably first mentioned by Paluchowski (2001); in his later paper (Paluchowski, 2007) the author describes this phenomenon as a general artefact in communication. The effects of receiving feedback on the results of the psychological examination are analysed by Bąk (2009, 2010). The author points out the danger of over-interpretation of information by patients (the Barnum effect) and potential change of behaviour according to the mechanism of self-fulfilling prophecy. This underlines the importance of psychologists working with people to be aware of these mechanisms. Margasiński (2009a, 2009b, 2010, 2011) reviewed the literature demonstrating the risks of the Barnum effect occurring in the diagnosis of phenomena associated with the functioning of alcoholic families, such as the so-called co-dependency or the so-called adult children of alcoholics syndrome. Fronczyk (2010) included an attempt to systematise research on the Barnum effect in his questionnaire diagnosis in a review study. The author identifies four groups of factors taken into account in the research on the determinants of the Barnum effect, including the properties of false feedback, the actual and perceived properties of the source of information, the irrationality of the respondents and the cognitive errors they make, and personality traits that encourage more frequent acceptance of false feedback.

3. Assumptions and Objectives of the Research

The conducted research focuses on the diagnostic properties of the so-called ACDF checklists operating in the Internet and the properties of the items of the Barnum Questionnaire, the Polish version of which is an original translation of the Barnum items used by Forer.

The first objective of the conducted exploratory research is to assess the diagnostic value of descriptors attributed to the so-called ACDF syndrome, which are included in ACDF checklists in the form of statements to which the surveyed person is to refer by selecting an appropriate point on an attached scale. Since there is no definition of the ACDF syndrome, as mentioned earlier, the theoretical relevance of the proposed ACDF checklists cannot be assessed. Therefore, for the purposes of this research, the concept of *specificity* of the statements used in the ACDF checklist examination was introduced. The assessment of the diagnostic value of descriptors attributed to the so-called ACDF syndrome included in the analysed checklist was guided by the following research questions: (1) Are there statistically significant differences between the group of people from dysfunctional families identified by the Family Experience Questionnaire and the control group? If yes, then (2) how many differences in the analysed ACDF checklist are there and for which statements they occur?

It is assumed that a statement is specific for the identification of the ACDF syndrome if it differentiates at a statistically significant level between the group of people from dysfunctional families and the control group. On the other hand, the absence of a statistically significant difference for individual items of the ACDF checklist between the dysfunctional and control group will, in principle, indicate the non-specificity

of a given item. It could therefore be assumed that only those statements which are specific in the sense provided above would have some diagnostic usefulness.

The second objective of the study was to evaluate individual items of the Barnum Questionnaire within separate groups. The detailed analysis was guided by the following questions: (1) What is the structure of the responses to the individual statements of the Barnum Questionnaire?; (2) Are there statistically significant differences between the group of subjects from dysfunctional families identified by the Family Experience Questionnaire and the control group in terms of individual items? If yes, (3) how many are there in the analysed questionnaire and what are these statements?

Barnum statements, as mentioned earlier, are specific descriptions of personality traits that are universally accepted. To determine this property of the Barnum statements, the name *universal statements* was used, and their universality was to be demonstrated by the support of more than 75% and the lack of statistically significant difference between the groups identified. This ascertainment will allow for the determination of how many and which items of the Barnum Questionnaire are universal statements and will be considered conducive to the emergence of this mechanism.

In the empirical study undertaken, hypotheses have been abandoned and only research questions have been used (see Nowak, 1985, pp. 35–36). Such a research perspective is justified mainly by the lack of theoretical background in the form of a coherent set of statements concerning the ACDF syndrome and the lack of standardised tools. The task of this research is to identify and attempt to assess a certain section of the psychological diagnostic practice.

4. Method

4.1 Procedure

The research was conducted among full-time students of the Jan Długosz Academy in Częstochowa, in autumn 2012. Students were informed that they are participating in a psychological project which aims to create new personality questionnaires (called Your Self-assessment 1 and Your Self-assessment 2, and in reality, they completed the Barnum Questionnaire and the questionnaire on the so-called ACDF). Besides, they were asked to fill in the Family Experience Questionnaire, which de facto served to divide the respondents into two groups: those from families conventionally defined as dysfunctional and without such burdens (the control group). The procedure for identifying a dysfunctional group based on the respondents' self-description is generally insufficient and may raise doubts. There is extensive literature available on family functions, which could be used to determine the criteria of family dysfunctionality. However, this would require completely different procedures and resources. Nonetheless, this type of research model is frequently employed, for example, in American research on identifying so-called adult children from alcoholic families, or so-called adult children from dysfunctional families, when the division into groups is made based on a self-assessment questionnaire (e.g., George, La Marr, Barrett, & McKinnon, 1999) or by using a simple screening test for the evaluation of parents by children, that is the Father/Mother Short Michigan Alcoholic Screening Test (SMAST; Logue, Sher, & Frensch, 1992). It is not uncommon to use the Children of Alcoholics Screening Test (CAST)

versions shortened to 5–6 items for screening; a meta-analysis of 98 studies based on such a research scheme and the methodological risks arising therefrom, especially in the sphere of interpretation, was carried out by Vail, Protinsky, and Prouty (2000). As regards the issues in question, however, the intention was to conduct an *initial exploratory study* and, for such purposes, an assignment based on self-description of the subjects seems sufficient. After the completion of questionnaires, the subjects were informed about the actual objectives of the research.

4.2 Measures

As mentioned earlier, three tools have been developed for this research: Family Experience Questionnaire, Barnum Questionnaire and questionnaire on the so-called ACDF.

The Family Experience Questionnaire consisted of respondent's particulars and 11 questions concerning the degree of experiencing various psychopathological disorders in their generational families (alcoholism, violence, poverty, unemployment, sexual harassment) with a 5-point set of answers (*Definitely yes – Rather yes – I don't know – Rather no – Definitely no*). Answers *Rather yes* and *Definitely yes* to any of the questions related to psychopathological experiences qualified respondents to the dysfunctional group.

The Barnum Questionnaire contained 11 items used by Forer (1949), compare Logue, Sher, and Frensch (1992). The instruction explained to the respondents that the questionnaire contained a description of several personality traits, and respondents were asked to indicate the extent to which those traits relate to them. There were only three answers to choose from: *Yes – ?* (*I have no opinion*) *– No*. Statements used in the questionnaire are listed in Appendix B.

The questionnaire on the so-called ACDF was based on an online checklist. Many blogs, forums and websites dedicated to therapeutic assistance or self-help (e.g., www.super-zdrowo.pl; www.leczmy-alkoholizm.org; www.przemiany.com.pl) use such a set, with virtually identical wording, which may indicate its widespread application. The 24 items have been worded in such a way that it was possible to respond with *Yes – ?* (*I have no opinion*) *– No*; this was preceded by an instruction emphasising that there are no right or wrong answers, but that the respondent should choose specific personality traits which relate to him/her. Statements used in the questionnaire are provided in Appendix A.

4.3 Participants

Based on the results obtained in the Family Experience Questionnaire, out of the examined group of 112 students, 79 were qualified to the control group (without family burdens), and 33 people to the dysfunctional group (30 women and 3 men). The dysfunctional group included 76% of people indicating alcohol problems in the family, 13% indicating abuse, 11% indicating chronic unemployment of one or two parents; there were no indications of poverty or sexual harassment. The average age was 23.1 years in the control group and 24.2 years in the dysfunctional group. There were no statistically significant differences in average age, gender composition or parental education between the groups.

5. Results

5.2 Specificity of Descriptors Assigned to ACDF

With all the tools used, higher intensity of the mean values calculated for individual responses in a given group indicates a stronger acceptance of a given claim by the respondents. The ACDF checklist used in the study consists of 24 statements, which were addressed by the test subjects by selecting a response on a 3-point scale.

Table 1
Evaluation of the differences in the level of confirmation of ACDF checklist items in the dysfunctional and control group (Mann-Whitney U test)

ACDF	Sum of ranks Dysfunctional	Sum of ranks Control	*U*
ACDF1	1170.5	1040.5	479.5
ACDF2	1097.5	1113.5	536.5
ACDF3	1128	1083	522
ACDF4	1255.5	955.5	394.5*
ACDF5	1249	962	401*
ACDF6	1160	985	424
ACDF7	1177	1034	473
ACDF8	1146	1065	504
ACDF9	1132	1079	518
ACDF10	1188	1023	462
ACDF11	1232	979	418
ACDF12	1167.5	1043.5	482.5
ACDF13	1076.5	1134.5	515.5
ACDF14	1197.5	1013.5	452.5
ACDF15	1113.5	1097.5	536.5
ACDF16	1136	1075	514
ACDF17	1118	1093	532
ACDF18	1131	1080	519
ACDF19	1043	1168	482
ACDF20	1221	990	429
ACDF21	1190	1021	460
ACDF22	1201.5	1009.5	448.5
ACDF23	1140	1071	510
ACDF24	1173	1038	477

* $p < .05$.

Table 1 presents the results of the collation of the dysfunctional group and the control group in terms of individual items of the checklist for the so-called ACDF. For illustrative purposes, Figure 1 shows the profiles of both groups in terms of items of the questionnaire on the so-called ACDF. Profiles are drawn up on the basis of average coding responses: *yes* – 1 point, *I have no opinion* – 0 points, *no* – coded as –1 point.

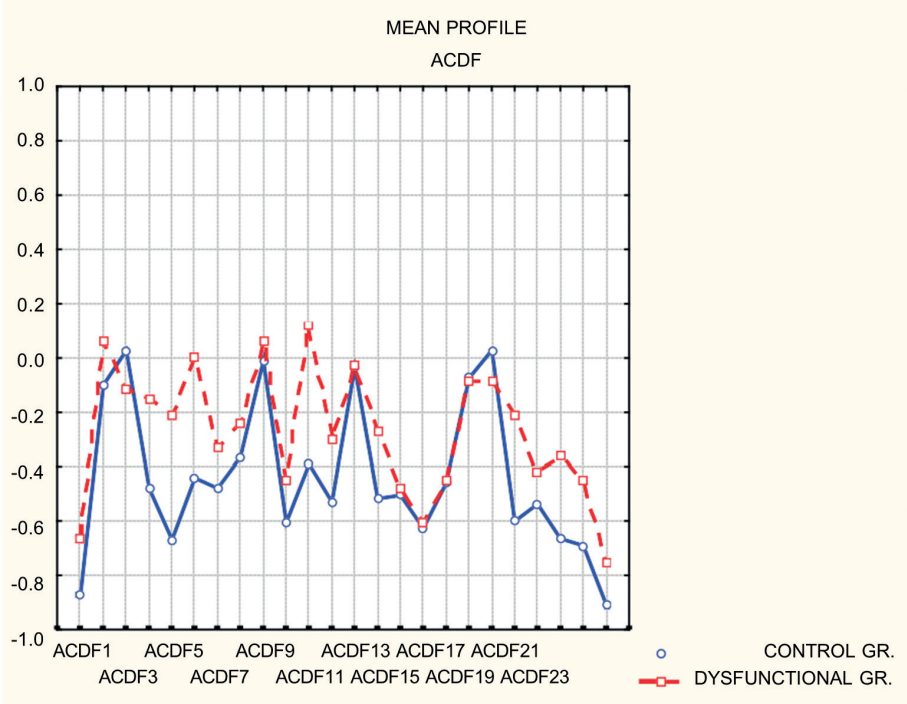

Figure 1. Mean profiles for the so-called ACDF checklist items in the dysfunctional and control group.

Statistically significant differences at $p < .05$ can only be observed for ACDF4: *You generally judge yourself mercilessly, you have low self-esteem or a sense of complete worthlessness* and the ACDF5 statement: *You find it difficult to have fun and to experience joy due to constant tension.* Therefore, only these items could be considered as possibly specific to the so-called ACDF syndrome. As we can see, these items relate to low self-esteem and the level of internal tension. The Figure 1 shows greater differences, at the statistical trend level ($p < .10$), in ACDF11: *You constantly need recognition and affirmation,* ACDF20: *You live in isolation from people even when you are seemingly among them,* and ACDF24: *You become addicted to alcohol, to addicted partners or both.* Those items could be considered as specific descriptors when attempting to create a standardised tool. However, the profiles obtained show that the 22 items do not differentiate between the dysfunctional and the control group and therefore are not specific (in the sense previously assumed) ACDF descriptors.

Besides, as can be clearly seen in the Figure 1, both groups had low scores for ACDF statements, including the dysfunctional group, where high acceptance would be expected. With a maximum possible score of 24 points and a minimum of –24 points,

the average score in the dysfunctional group is –6.48 points, the median is –8 points, the mode is –13 points, and in the control group the average score is –11.15 points, the median is –12 points, the mode is –8 points.

5.3 Barnum Statements Analysis

Each statement of the Barnum Questionnaire was assigned a 3-point scale. The answer *yes* is coded as 1 point and indicates a high degree of acceptance of the statement, the answer *no* indicates a lack of acceptance and is coded as –1 point and *I have no opinion*, which serves as a centre of scale, is coded as 0 points. Table 2 shows the percentage distribution of results in the entire surveyed group, in the group of people from dysfunctional families and in the control group, and the statistical significance of differences in both groups. A two-sided stratum weight test was used to assess the significance of differences.

Table 2
Results obtained for the statements of the Barnum Questionnaire (N = 112)

Barnum Statements	Entire group	Dysfunctional	Control	Difference in the level of acceptance
	%	%	%	%
B1: You have a strong need to be liked and admired	42.6	54.8	37.7	17.1
B2: You tend to be too critical	77.1	80.6	75.6	5.0
B3: You have many unused abilities that you haven't turned into your strengths	50.9	41.9	54.4	–12.5
B4: You have some personality flaws, but generally you can balance them out	85.5	80.6	87.3	–6.7
B5: While on the outside you look disciplined and in control, you sometimes get worried and anxious on the inside	88.2	90.3	87.3	3.0
B6: You sometimes seriously doubt whether you made the right decision	85.5	96.7	81.0	15.7*
B7: In general, you prefer diversity; you become dissatisfied when you are faced with limitations and restrictions	75.5	80.6	73.4	7.2
B8: You are independent in your thinking and do not accept statements by others without satisfactory proof	60.0	70.9	55.7	15.2
B9: You find it foolish to reveal too much to others	57.3	54.8	58.2	–3.4
B10: Some of your aspirations can be unrealistic	48.2	41.9	50.6	–8.7
B11: Security is one of your priorities in life	79.1	80.6	78.5	2.1

Note. Items for which the acceptance level in the entire group is higher than 75% are marked in grey.
* $p < .05$.

Statements B1 and B10 obtained results lower than 50% in the entire surveyed group. Differences in results are observed in the dysfunctional and control group.

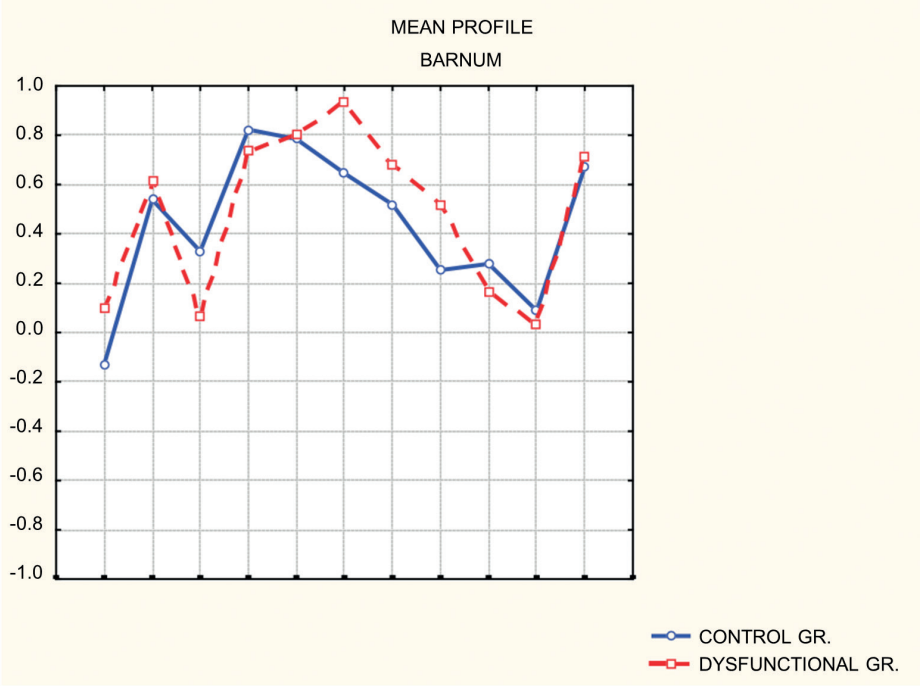

Figure 2. Acceptance for Barnum statements in the dysfunctional (n = 33) and control (n = 79) group.

Items B3, B4, B9 and B10 have lower scores in the dysfunctional group than in the control group. The other seven items have a higher level of acceptance in the dysfunctional group (Figure 2), but only one difference, concerning statement B6, is statistically significant. This item scored higher in the dysfunctional group, although it is high in both groups (96.7% and 81.0% respectively). A level of acceptance above .5 points is observed for the six statements of the questionnaire: B2, B4, B5, B6, B7 and B11. As shown in Table 1, the rate of positive answers for these items is over 75%. In general, the profiles show that the level of acceptance of each of Barnum statements varies, but exceeds the mean of 0 points, that is the middle of the scale, except for item B10. In the dysfunctional group, all the statements obtained the mean higher than 0 points, and in the comparative group, the mean below 0 points is observed only for statement B10. Six of the eleven statements used in the Barnum Questionnaire survey reached the score of over 75% for the entire survey group. Respondents from the dysfunctional and control group differed in the level of acceptance of Barnum statements, however, this difference is statistically significant ($p < .05$) only for one item, i.e. item (B6) for which a high level of acceptance was observed in the entire group (85.5% of the answer *yes*). The dysfunctional and control groups do not differ in the number of statements of acceptance over .5 points. Therefore, the five items of the Barnum Questionnaire can be considered to

be universal according to the adopted assumptions: B2, B4, B5, B7, B11. Although B6 has the support of over 75% in both groups, it differentiates between the dysfunctional and the control group and therefore does not meet the adopted condition of universality. Indicated items are highlighted in Table 2 in dark grey.

6. Summary and Discussion

The Barnum effect is a relatively simple but powerful psychological mechanism. Research conducted on the Polish sample confirms the high level of identification with Barnum statements (six out of 11 statements received acceptance at a level over 75%, and only two of them were below 50%). The level of acceptance of Barnum statements differs in the dysfunctional and control groups at a statistically significant level for only one item. In total, five items from the analysed Barnum Questionnaire are universal for the population of young people (represented by the surveyed group) and these statements should be eliminated both in the diagnostic process and in the construction of measurement tools. The criteria of universality applied in the study were quite exorbitant, and if new tools were to be developed, it would be prudent to apply this conclusion to all other Barnum statements. Studies cited in this article indicate a wide occurrence of the Barnum effect. In this context, the area of psychological diagnosis appears as a particularly sensitive field. The development of new "hard" psychological tests is an arduous struggle with the psychometric requirements for different types of accuracy and reliability that may last for many years. These procedures, compliance with the criteria of accuracy and reliability, should themselves eliminate the possibility of the occurrence of the Barnum effect. In this context, being aware of this mechanism may be helpful at the initial stage of item selection, when choosing specific and non-specific (Barnum) statements.

This is not the case in the area of social pathologies and the accompanying psychological assistance. The therapeutic reports from these experiences are the leading edge in the description of new psychological phenomena and mechanisms. After all, not all individual reports stand the test of time and become descriptions of universal mechanisms. The phenomena popularised in the last 20–30 years, such as the so-called Adult Children of Alcoholics Syndrome (ACOA), the so-called co-dependency, the so-called Adult Children of Dysfunctional Families Syndrome (ACDF), do not constitute nosological units included in the ICD-10 and DSM-IV classifications. They give rise to many definitional doubts, which implies diagnostic and research challenges. There is a dramatic lack of reliable diagnostic tools with regard to these areas. However, since life abhors a vacuum, they have been replaced by various kinds of "checklists", which are multiplied in the age of the Internet. As these publicly available ACOA/ACDF checklists are not standard psychological diagnostic tools, clinicians must be aware of their limitations. As demonstrated by the conducted research, 22 out of 24 items of the discussed tool used to diagnose the so-called ACDF are not specific descriptors, and any diagnosis based thereon may possess all the characteristics of an artefact. Needless to say, this may be particularly acute when patients/readers/Internet users perform a self-diagnosis. Professional diagnosticians need to be aware of this, and readers and patients should be warned against using these lists. Similar caution should be exercised when recommending bibliotherapy or education through various web portals to clients, as such sources usually use sets of indicators repeated after popular psychological self-help publications. A clinician with an elementary psychometric education will notice

that there is a lack of any standards here, and popular guidebooks usually make no effort to address this issue. They typically use the following phrase: If you find that you exhibit any of the characteristics in the list below, you are most likely to have symptoms of co-dependency, you are an ACOA (or ACDF) etc. The self-diagnosis reported by the client can be either an auto-suggestion or a major simplification. Clinical diagnosis should differentiate the specific character of the symptoms attributed to a given syndrome with indicators such as generalized stress, type D personality, obsessive-compulsive disorders, attention disorders, addictions or, simply, Barnum statements.

It is also important to point out the limitations of the conducted research. The analyses conducted did not, in principle, refer to the nosological status of the so-called ACDF syndrome, but only addressed the diagnosis of this phenomenon through a checklist used on the Internet. Preliminary research was conducted with groups selected based on the self-description of respondents. This was done with the use of the Family Experience Questionnaire, which is not a standardised tool in and of itself. For exploratory research of this nature, its application has proved sufficient. It allowed for the separation of two groups, and the results among the groups proved to be differentiating, which justified the adopted division. However, it cannot be claimed that a dysfunctional group allocated in this way fulfils the relevant criteria associated with dysfunctional families, thus it would be necessary to repeat the research on the actual clinical groups identified, for example in health care institutions providing psychotherapy. Moreover, further verification of both the so-called ACDF checklist and Barnum statements should certainly be carried out on other, diverse and larger study groups.

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Appendix A
The list of items used in the study for the diagnosis questionnaire of the so-called adult children from dysfunctional families, developed on the basis of literature and websites

1. You often have difficulty in determining what is normal and you have to guess.
2. You have difficulty in carrying out your intentions from start to finish.
3. Sometimes you lie even though you could tell the truth.
4. In general, you judge yourself mercilessly, you have a low self-es teem or a sense of complete worthlessness.
5. You find it difficult to have fun and to experience joy due to constant tension.
6. You take yourself terribly seriously.
7. It is difficult for you to have an intimate relationship.
8. You are afraid of being rejected, but you often reject yourself.
9. You overreact to changes that you have no control over.
10. You feel different, you feel that no one is experiencing the same problems as you.
11. You constantly need recognition and affirmation.
12. You are either overly responsible or overly irresponsible.
13. You are loyal towards others even when faced with evidence of disloyalty.
14. You demand immediate satisfaction of your wishes.
15. You automatically give in to the situation instead of considering other options.
16. You seek tensions and crises and then you complain about them.
17. You avoid or exacerbate conflicts and rarely resolve them.
18. You are afraid of failure, but you sabotage your own successes.
19. You are afraid of criticism, but you criticise and judge yourself.
20. You live in isolation from people, even when you are seemingly among them.
21. You feel guilty every time you stand or want to stand up for your rights.
22. When things are going well, you are confused and bored, waiting for some thing to happen. Decent, calm, tender partners are dull and dumped.
23. You react mainly to what others do, losing your own sense of self.
24. You become addicted to alcohol, to addicted partners or both.

Appendix B
The list of items consisting of Barnum statements used in the study

1. You have a great need to be liked and admired.
2. You tend to be too critical of yourself.
3. You have many unused abilities that you haven't yet turned into your strengths.
4. You have some personality flaws, but generally you can balance them out.
5. While on the outside you look disciplined and in control, you sometimes get worried and anxious on the inside.
6. You sometimes seriously doubt whether you made the right decision.
7. In general, you prefer diversity; you become dissatisfied when you are faced with limitations and restrictions.
8. You are independent in your thinking and do not accept statements by others without satisfactory proof.
9. You find it foolish to reveal too much to others.
10. Some of your aspirations are unrealistic.
11. Security is one of your priorities in life.