

Pseudopsychics and the Barnum Effect

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Abstract: The present study considers whether statements used by pseudopsychics in ostensibly psychic readings are accepted as true by clients because they exploit the Barnum Effect. Material drawn from the pseudopsychic literature was mixed with classic Barnum statements and given to 44 subjects ostensibly as feedback on a projective measure completed earlier. Subjects rated the degree to which they felt the statements were accurate in describing them. Comparing the performance of the two statement sets indicated that the Barnum items were more strongly accepted ($W = 75, p < .0005$, two-tailed), but that acceptance of the two item types covaried across subjects ($r_s = .597, p < .0001$, one-tailed). It is suggested that this was unlikely to be due to differential susceptibility to demand characteristics. Attempts are made to account for these findings by proposing that a subset of outlying pseudopsychic statements which did not induce acceptance may have served to depress the performance of the set as a whole. The subset was characterised as being less general or favourable in form than is usually necessary to induce the Barnum Effect.

Introduction

Critics of parapsychology have often dismissed evidence drawn from psychic readings, however impressive, as being the result of the (conscious or unconscious) use of deceptive practices known collectively as 'cold reading' (e.g. Dutton, 1988; Randi, 1981; Tobacyk, Milford, Springer & Tobacyk, 1988). The cold reading technique has been defined rather loosely by Hyman (1977) as 'a procedure by which a "reader" is able to persuade a client whom he has never met before that he knows all about the client's personality and problems' (p. 20). In practice, the meaning of the term has tended to vary from case to case; from active pre-session information gathering (Couttie, 1988) to simple reliance on using statements that are true of most people (Dutton, 1988). Although this would seem to be a somewhat simplistic characterisation when applied to all instances of

apparent paranormal communication, it rightly draws attention to some of the ways in which clients can be deceived into believing that a claimant has uncanny knowledge about them.

The extent to which it is possible for claimants to use such deceptive practices is perhaps best illustrated by reference to the growing specialist literature that claims to provide instruction on how to set up as a pseudopsychic¹. Many of these publications include formulaic readings for the prospective reader to adapt for their own use (e.g. Cain, 1991; Webster, 1990), or provide at least some examples of statements that are general enough in character to be used with most, if not all, clients (e.g. Corinda, 1958/1984; Earle, 1990). Given enough information leakage from the client (using sources such as their clothing, physical features, and carriage through to non-verbal and even verbal communica-

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¹ A pseudopsychic can be defined here as a person who produces information or effects that are claimed to be the result of special abilities, but that are in fact generated through normal means.

tions from them) the process of cold reading can give rise to what appears to be accurate specific information (Couttie, 1988; Schwartz, 1978). However, a recent review of this literature (Roe, 1991) has suggested that even where a pseudopsychic is using a number of quite sophisticated cold reading techniques, a substantial proportion of the reading necessarily remains in the form of general statements.

The success of these statements has been attributed, by both skeptics (e.g. Hyman, 1977) and pseudopsychics (e.g. Earle, 1990) alike, to clients' susceptibility to the Barnum Effect, an effect defined by Dickson & Kelly (1985) as 'the psychological phenomenon whereby people accept general personality interpretations as accurate descriptions of their own unique personalities' (p. 367). Indeed, Earle (1990) has actually recommended that aspiring pseudopsychics use a crib sheet made up exclusively of Forer's (1949) original set of Barnum statements. However, this is very much the exception, and many recommended personality descriptions are of a form that shares what may only be superficial similarities with the Barnum personality sketch, as the pseudopsychic presentations respond to the different expectations of their intended audience. Thus while the comparison seems plausible enough, the claim that pseudopsychic statements are accepted because they utilise the Barnum effect must remain as yet unsubstantiated.

Research on the Barnum effect has been considerable; to date, there have been three substantial reviews of Barnum literature (Dickson & Kelly, 1985; Furnham & Schofield, 1987; Snyder, Shenkel & Lowery, 1977), which together refer to over seventy independent studies. Typically, these studies are presented to subjects as an attempt to further evaluate some assessment device (such as a Rorschach test) by considering how successfully it can describe respondents purely on the basis of their responses (such as their interpretation of Rorschach inkblots). Subjects complete the measure, and after some delay are provided with personality feedback ostensibly derived

from it. In fact, all subjects are provided with the same personality sketch made up of general statements. These statements are rated according to the degree to which the subject believes them to be true of himself or herself. Subjects tend to be very impressed with the accuracy of such feedback (see, e.g., Ulrich, Stachnik & Stainton, 1963), which can even lead them to have elevated faith in the assessment device or the diagnostician (Snyder, Larsen & Bloom, 1976).

Much of the literature has concerned itself with attempts to characterise the factors that may induce acceptance, and has concentrated on three broad areas, namely (i) characteristics of the subject, (ii) characteristics of the feedback items, and (iii) characteristics of the context in which (sham) assessment occurs and/or feedback is given. The findings of these studies have generally been disappointing, producing equivocal or at best weak effects (Furnham & Schofield, 1987): but of these effects, the most robust have been associated with aspects of the subject's personality that may be seen as reflecting some general concept of 'gullibility' (for an alternative characterisation, however, see Johnson, Cain, Falke, Hayman & Perillo, 1985; Layne, 1979; Standing & Keays, 1987). In particular, high acceptance of Barnum statements has been associated with subjects expressing a high need for approval (Mosher, 1965; Orpen & Jamotte, 1975; Snyder & Larson, 1972), and with external scores on measures of locus of control (Orpen & Jamotte, 1975; Snyder, 1974; Snyder & Shenkel, 1976). Should pseudopsychic statements be exploiting the same mechanism that induces Barnum acceptance, then they may be expected to show similar covariance with such personality factors.

However, the Barnum effect should not be seen simply as a matter of exposing gullibility on the part of the respondent. Rather, properties of the statements themselves, including most notably generality (Furnham & Varian, 1988), favourability (Snyder *et al.*, 1977) and triviality (Greene, 1978), suggest a more complex interpretation. Recent work (Roe, 1994) has argued

that such characteristics are effective not because the items are thus *necessarily* true for subjects, but rather because they encourage the respondent to actively elaborate on and interpret the given material in personally relevant ways. Thus the Barnum effect may involve both characteristics of the subject and properties inherent in the statements themselves.

The present study was designed to assess whether the statements recommended and used by pseudopsychics could replicate the performance of traditional Barnum statements when presented in the context of a conventional Barnum study. Replication here would consist of similarly high general acceptance, and similar covariance with individuals' scores on measures of need for approval and locus of control. Thus it was predicted;

H₁: Acceptance levels for the pseudopsychic items will differ from those for traditional Barnum statements².

H₂: Acceptance levels for pseudopsychic statements will covary with Barnum acceptance across individuals, such that high scorers on one will also score highly on the other³.

H_{3a}: As individuals' scores on a measure of locus of control tend towards the external, so their acceptance levels for Barnum items will increase.

H_{3b}: As individuals' scores on a measure of locus of control tend towards the external, so their acceptance levels for pseudopsychic items will increase.

² The wording of this hypothesis is such that it can be directly tested. Given the assumed similarity of the statement types, I would expect this prediction not to be supported here. I am grateful to one referee for drawing attention to the difficulty of drawing meaningful conclusions on the basis of accepting the null hypothesis. However, we do not have to address those problems here, since the null was, in fact, rejected.

³ Note also that if H₂ is supported, then H_{3a} and H_{3b} will not be independent; nor will be H_{4a} and H_{4b}.

H_{4a}: As individuals' scores on a measure of need for approval increase, so their acceptance levels for Barnum items will increase.

H_{4b}: As individuals' scores on a measure of need for approval increase, so their acceptance levels for pseudopsychic items will increase.

Method

Materials

Discrete items consisting of between one and four sentences were drawn from the pseudopsychic literature⁴. Repetitions of items from different sources, or items expressing similar themes, were omitted to give an initial pool of potential Barnum statements (henceforth referred to as pseudopsychic statements). Other changes were made to some items in order to increase their appropriateness to the given context (i.e., so that they would be plausible as feedback from a projective test). Changes were only made at the superficial level of, for example, replacing terminology associated with psychic reading (such as 'I see you as...' or 'I get the impression that you...') with wording more typical of psychometric feedback (such as 'You are...' or 'You have found...').

Despite these changes, some items were by their very nature unsuited to presentation via a 'traditional' Barnum protocol, since they made predictions about the client's future that would not be likely to be revealed through completion of a psychometric test, no matter how 'mysterious'. To overcome this, all pseudopsychic statements were assessed independently by five judges (members of the parapsychology unit at Edinburgh) who rated the likelihood that the information revealed could legitimately be gleaned, or readily inferred, from information contained in a projective measure. It was not important here to generate an actual measure of likelihood, but

⁴ Further details of the selection procedure are given in the appendix.

rather to reflect subjects' likely satisfaction with the information they would be given, and thus maintain their faith in the dummy protocol. Using a six-point scale, where 1 = 'certainly detectable' and 6 = 'certainly not detectable', only those items with a total rating of 15 or less (which equated to a mean rating of 3 or under) were retained to give a pool of 30 items for use in the study.

In order to ensure that subjects were given a manageable amount of feedback to evaluate, statements were divided randomly by the experimenter using random number tables (RAND Corporation, 1955) into two subgroups (A and B), each containing 15 items. To these were added a set of 15 Barnum statements drawn from items used by Forer (1949), Sundberg (1955), and Paterson (1955) so that each personality sketch consisted of 30 statements. A full list of items is given in the appendix.

The study made use of a sham context in which subjects were given the House-Tree-Person projective measure (Buck, 1949), chosen because the test's assessment method was seen as being suitably vague or 'mysterious', a factor that has previously been shown to facilitate acceptance of Barnum statements (Richards & Merrens, 1971; Snyder, 1974).

Subjects

Forty-four volunteers acted as subjects, of whom 9 were male and 35 female. Previous studies (e.g. Halperin, Snyder, Shenkel & Houston, 1976; Snyder & Shenkel, 1975) have indicated that sex differences have little influence on strength of the effect and so the biased sample was not considered problematic. Subjects' ages ranged from 18 to 37 with a mode and mean of 20 (SD = 2.73).

Procedure

Second year psychology undergraduates at the University of Edinburgh were asked to participate in 'a study to evaluate new assessment techniques for the House-Tree-Person (H-T-P) test'. Subjects were approached individually or in small groups

to enable a more relaxed but involved recruitment procedure, in which the dummy protocol was explained and questions answered. They were asked to decide whether to participate only after they were confident that they understood what would be expected of them.

Upon recruitment, subjects were given measures of locus of control (Rotter, 1966) and social desirability (Crowne & Marlowe, 1960) which were to be used ostensibly as sources of external validity for assessing the H-T-P feedback. These were completed at leisure and returned after approximately seven days when subjects met individually with the experimenter to undertake the H-T-P test. The test itself involved drawing a house, a tree and a person using any or all of a range of materials provided. It was emphasised that artistic ability was not an important factor, and that the test gave best results if the subject relaxed and tried to have fun while producing his or her drawings. Subjects were informed that the drawing(s) would be sent out to a team of people who had recently been trained to interpret this type of material in a more holistic and meaningful way than had previously been attempted. This was designed to prime them to be more open to the kind of psychic-reading-based information they would receive.

A further week later subjects returned to be given feedback. This was supplied in typewritten form as discrete, numbered statements on a sheet marked with each subject's own personal identification number. Statements were evaluated individually by each subject according to how well each statement applied to them, using a five-point scale from 1 ('almost entirely wrong') to 5 ('amazingly accurate')⁵.

Subjects were debriefed individually once they had completed the evaluation of

⁵ This rather non-standard rating scale (after Carrier, 1963) was adopted because it has a history of use in the Barnum literature and is still current (see e.g. Furnham & Varian, 1988). It would be counter-productive to introduce changes to the protocol just for change's sake, in particular as this would restrict the comparability of these data with previous findings.

feedback⁶. The debrief, which typically lasted between 30 and 60 minutes, concentrated on three issues: firstly, a justification of the necessity of an element of deception here in order to elicit valid responses from them; secondly, an assurance that their acceptance of the dummy protocol did not reflect badly on them since great care had gone into generating a plausible cover story; and thirdly, an opportunity was given for subjects to work through their own thoughts and feelings about the study and to ask questions about the design should any aspect still be unclear to them. It is comforting to note that no subject exhibited any negative reaction (such as annoyance or embarrassment) on being informed of the true nature of the study. Rather, the typical reaction was one of pleasant surprise, with many being intrigued by the relative complexity of the design.

Results

Mean ratings for pseudopsychic statements were similar for subsets A and B [$U = 101.0, p = .89$, two-tailed] suggesting that the two statement sets were comparable. Similarly subjects allocated subsets A and B did not differ in their degree of acceptance of conventional Barnum statements [$U = 261.5, p = .611$, two-tailed]. It was therefore felt appropriate to combine data for subsequent analyses.

(i) Do pseudopsychic statements produce similar ratings to those for the Barnum statements?

(a) Viewing the frequency distributions for the mean ratings of the two sets of statements (Figure 1) suggests that as a group, acceptance was higher for the Barnum statements than for either set of pseudopsychic statements. Comparing mean

⁶ It should be noted here that it is rare for accounts of Barnum studies to include details of how the deception was justified to subjects. The unfortunate implication is that little care has been taken to ensure subjects' subsequent psychological well-being.

acceptance rates for the two types of statement reveals that Barnum items were better accepted to a highly significant degree [$W = 75, N = 42, p < .0005$, two-tailed], requiring us to reject the null hypothesis in favour of H_1 . However, almost all of the pseudopsychic statements still achieved mean ratings that are post hoc significantly above the mid-value of 3 ('about half and half') [$W = 27, N = 30, p < .001$, one-tailed] and therefore tended to be accepted as true of the client.

(b) We can also consider whether acceptance of the pseudopsychic statement pool covaries with Barnum pool acceptance across individuals, which would be suggestive of both sets of stimuli adopting the same modus operandi, or exploiting similar intra-subjective variables (such as, though not necessarily, some general gullibility factor). Results from this study (Figure 2) suggests that they do. Correlating subjects' ratings for Barnum and pseudopsychic statements yields a highly significant result [$r_s = .597, N = 44, p < .0001$, one-tailed], indicating a strong tendency for high scorers on one measure to score highly on the other, and low scores on one to be associated with low scores on the other. Thus we may feel justified in accepting H_2 .

(ii) Does acceptance covary with the other personality data in similar ways?

Subjects' mean ratings both for pseudopsychic and Barnum items were correlated with scores on measures of locus of control and need for approval. These results are summarised in Table 1. No significant relationship is evident between acceptance ratings for pseudopsychic statements and these personality measures ($p = .953$ and $.516$ for need for approval and for locus of control respectively), and we therefore reject H_{3a} and H_{3b} . However, there is equally no relationship apparent between these variables and acceptance of classical Barnum statements either ($p = .886$ and $.572$ respectively). Given the weakness

Figure 1
Frequency distribution of subjects' acceptance ratings for Barnum statements and for Pseudopsychic statements

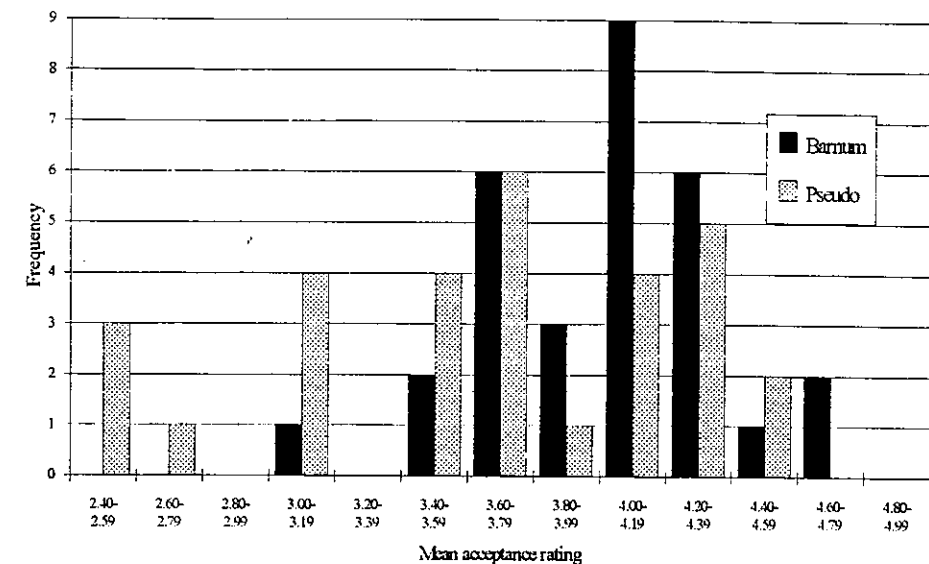


Figure 2
Scattergram of subjects' acceptance ratings for Barnum statements against acceptance for Pseudopsychic statements

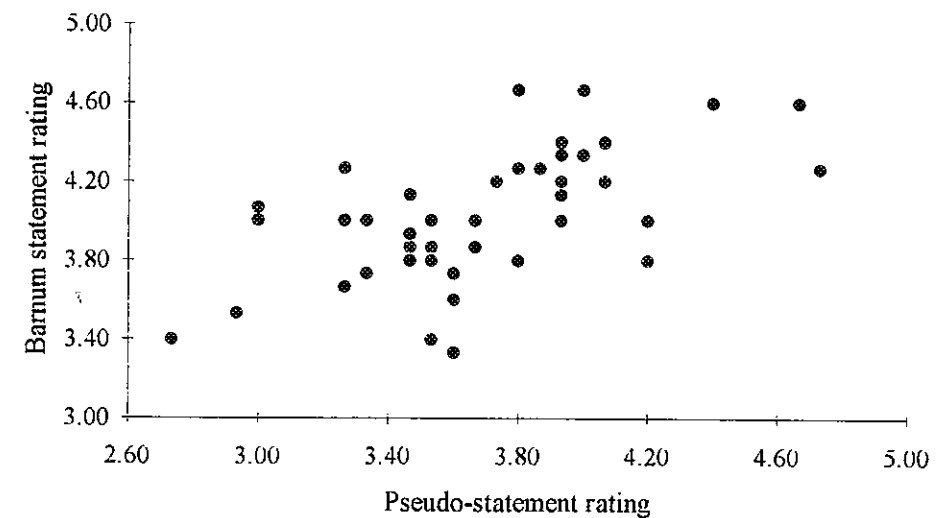


Table 1
Correlation coefficients describing the relationship between subjects' personality measures and acceptance data.

	Acceptance of Pseudopsychic statements	Acceptance of Barnum statements
Need for Approval	.009	-.022
Locus of Control	.100	-.086

of the correlations, which are likely to be due to chance, little store should be placed by the differences in the direction of the relationships between these variables and the two statement types.

(iii) Confounding variables

It is, of course, possible that acceptance represents an artifact of situational variables linked to demand characteristics, to which some subjects are more susceptible than others (although this would not directly explain the greater success of Barnum statements over pseudopsychic statements here). A post hoc measure was taken to evaluate this likelihood. Two independent judges, who were unaware of the purpose of the study, rated subjects' drawings in terms of the amount of effort that had been put into making them, independent of any natural drawing ability. Presumably, subjects who were more sensitive to situational pressures such as demand characteristics would be more likely to work longer or harder in producing their drawings. Alternatively, subjects who had spent longer on their drawings would feel greater pressure to accept feedback that was ostensibly based upon it (Festinger & Carlsmith, 1959; Linder, Cooper & Jones, 1967).

Although the judging criteria were loosely defined, there was a reasonable degree of inter-judge agreement ($r_s = .576$, $N = 44$, $p < .0001$, one-tailed). The mean effort rating so obtained for each drawing was compared with subjects' feedback ratings. Neither comparison approached significance (for the Barnum statements, $r_s = -.076$, $p = .618$; for the pseudopsychic state-

ments, $r_s = -.068$, $p = .654$), suggesting that situational factors of this sort at least were not influential in subject acceptance.

Another potential confound that can be considered here could be termed a 'scepticism variable' since it reflects subjects' scepticism in the assessment measure and in the proposed attempt to broaden the range of information given as feedback, as suggested by the sham context. This can be assessed by comparing judges' pre-study ratings of the likelihood that the information would be readily available, to a projective measure such as the House-Tree-Person test with subsequent acceptance ratings for those items. Statements rated as least likely to be available to a projective measure would presumably also tend to be regarded by subjects as the most speculative or tentative suggestions made by an assessor experimenting with the new-found freedom of interpretation. However, correlating mean judge ratings with mean acceptance ratings for each pseudopsychic statement⁷ gives a negative but non-significant result ($r_s = -.126$, n.s., one-tailed).

Discussion

Although the results do not provide wholehearted support for the notion that pseudopsychics are (wittingly or unwittingly) making use of the Barnum Effect in their selection of material, there is some room for optimism. In particular, the rea-

⁷ Note: we are restricted to considering the performance of pseudopsychic statements here, since no pre-test judgement of the appropriateness of classic Barnum statements was considered necessary.

sonably strong correlation between Barnum and pseudopsychic statement acceptance is perhaps a little surprising, given that the two sets of items exhibit significantly different acceptance levels.

How can the two findings be reconciled? A plausible explanation is that the pseudopsychic statements represent a weak subset of Barnum statements, whose performance is not quite as extreme as that of the latter, but which shadows their characteristic variation across individuals. It does seem unlikely that this covariance can be explained simply in terms of some individuals' increased susceptibility to demand characteristics, since those subjects who were targeted as especially susceptible did not exhibit greater levels of acceptance. Indeed, it should be noted from the distribution of mean acceptance ratings for pseudopsychic statements given in Figure 1 that it may be the inclusion of a few outlier statements that would not qualify as Barnum statements (indeed they fail the principal criterion of achieving a mean acceptance rating of 3.0 or better) that serve to depress the performance of the whole sets of items in relation to conventional Barnum statements.

The pseudopsychic literature may therefore provide a fruitful source of items to enable the pool of Barnum statements to be expanded. A number of researchers have previously attempted to introduce new items, but the selection process has often been very haphazard, with very little effort made to systematically validate them beyond some subjective measure of face validity. For example, Paterson's original profile was devised for use in luncheon club lectures, and no insight is given into how items were selected (see Forer, 1949), and Sundberg (1955) generated additional fake descriptions from 'judges' selections' without giving any detail as to the criteria used for selection. Yet these items are still preferred as stimulus materials (e.g. Johnson *et al.*, 1985). Pseudopsychic statements do at least lay claim to face validity, since they are recommended on the grounds that (it is claimed) they are generally accepted as true by clients.

The distribution of acceptance ratings does seem to support the consensus that important characteristics of Barnum statements are their generality and favourability (Furnham & Varian, 1988), since the pseudopsychic statements that did not fare so well give descriptions that are relatively specific⁸ (e.g. 'Children play an important role in your life') or relatively negative in orientation (e.g. 'Your life hasn't developed exactly the way you expected or would have liked. Many of your goals and plans have failed to materialise'). However, this is not a hard and fast rule, as other apparently negative statements (such as 'There are times when you felt your life is one long battle...') are nevertheless accepted. The determining factor appears to be a generality/vagueness attribute which these items possess, and which presumably allows the subject to interpret the statements in a less ego-threatening manner. It would be interesting to see whether subjects did show evidence of interpreting Barnum statements in this way. Research attempting to characterise the properties of Barnum statements has thus far met with only limited success (Furnham & Schofield, 1987), and further work certainly needs to be done in this area.

Some researchers have drawn attention to a self-other asymmetry, according to which subjects do not recognise that statements that they accept as true of themselves are equally likely to be true of others (Johnson *et al.*, 1985). While this is not yet considered a defining characteristic of Barnum statements, it would nevertheless be interesting to see if this property is also common to pseudopsychic statements. According to one account of the process by which Barnum statements are effective (Roe, 1994) this would necessarily be the case, and this represents a promising direction for future research. However, the present study was not concerned with characterising the properties of statements that

⁸ We might note here that Boerenkamp (1985) found that more than half of the statements produced by psychics in his study were regarded as having a greater than 1-in-2 chance of being true simply by chance.

cause them to be generally accepted, but rather was designed to determine whether pseudopsychic statements act in a similar manner to Barnum statements. Only once this general acceptance has been established does it become meaningful to investigate the characteristics that may induce it.

In retrospect, the item describing subjects as 'above average in intelligence' is problematic given the undergraduate population used here, for whom it is presumably a truism. We share the surprise of one referee in noting that the mean rating for this statement was 'only' 4.18, suggesting that unless our subjects were particularly concerned to express humility, they were not simply reflecting on the objective truth of statements, but were offering a subjective interpretation.

There could be a priori grounds for expecting pseudopsychic statements not to perform quite as well as classic Barnum statements, because many of the former were generated with a very different context in mind; however, this argument is not supported here. Judges' ratings of the appropriateness to the context of particular information were not able to predict subjects' subsequent acceptance levels to any significant degree. This notwithstanding, the psychic reading environment undoubtedly places alternative emphases on the type and form of information to be elicited, and the transformations that were necessary to generate appropriate pseudopsychic statements may not have been totally successful. The relative impact of the two sets of items may be markedly different if presented in a context that more accurately simulates the psychic reading environment. There is also a danger that the items that survived the selection process may no longer be representative of pseudopsychic statements generally, consisting instead of a particular subset with distinct (selected) characteristics. The selection process, however, was inevitable given the need to maintain the appearance of the supposed purpose of the study. If future studies were to present items in different contexts (e.g.

as feedback from a psychic reading) then they would not be so constrained.

Initially, it would also seem surprising that neither acceptance of Barnum nor of pseudopsychic statements was correlated to any degree with the personality measures of locus of control and need for approval, which represents a failure to replicate the findings of others (Mosher, 1965; Orpen & Jamotte, 1975; Snyder & Larson, 1972; Snyder, 1974). However, it should be noted that the effects previously reported have generally been quite small and inconsistent (Fichten & Sunerton, 1983), suggesting that even where such personality measures have some influence, theirs is not the primary motivation towards acceptance. Other work (Roe, 1994) has cast doubt upon the 'gullibility hypothesis' as the most appropriate means of accounting for the phenomenon. Alternatively, it could be argued that the generally high acceptance of statements across all subjects generates a ceiling effect that limits the amount of variance in scores within each factor, thereby artificially reducing any estimate of correlation between them. We await further work to resolve the relative influence of such factors upon Barnum acceptance.

In summary, the results of this study suggest that pseudopsychics are recommending the use of some statements that act in a similar way to Barnum statements, and that are capable of eliciting similar (if not quite so extreme) personal validation from recipients. This would tend to support the contention offered by some commentators sceptical of the veridicality of psi (e.g. Dutton, 1988; Randi, 1981) that apparently impressive psychic readings are, in part, a consequence of Barnum acceptance coupled with faulty recall. Such an interpretation is in keeping with the general finding that psychic readers tested under controlled conditions do not seem to be more accurate in their predictions than would be expected by chance (Boerenkamp, 1985, 1986; Schouten, 1993).

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Appendix: Statements and mean acceptance ratings

The initial pool of pseudopsychic statements was made up from readings in pseudopsychic manuals by Cain (1991), Earle (1990), Hester & Hudson (1977), Hobrín (1990), Martin (1990) and Webster (1990). Recommended readings in these sources are given in one of two forms, either as a series of distinct items, with instructions for when to apply each, or as one or more 'formula readings' designed to provide a template to be adapted for specific readings. For cases of the former, all items were initially taken, whereas for the latter, the readings were divided at those points at which the topic changed (which in practice was a very straightforward procedure). Some items expressed very similar ideas or even reproduced elements from other, earlier sources. Such repetitions were eliminated to give an initial pseudopsychic statement pool of 74 items. On the basis of independent judges' assessments, the 30 that were deemed most appropriate for the context were retained. These are listed

below, along with the classic Barnum statements used in this study. For all items, the mean acceptance rating is included for information.

Pseudopsychic statement set

1. You like to keep an open mind. [4.25]
2. You appear to be concentrating on the things that have gone wrong in your life. [3.54]
3. You wonder if your career is going in the right direction. You are feeling restless and unfulfilled. [3.63]
4. Children appear to play an important role in your life. [2.71]
5. You are quite concerned about a member of your family, possibly a child. They have caused trouble for you and your family on many occasions. You have tried to help but have met with resistance. [2.42]
6. You are a versatile person. You are both creative and practical, but it seems that these creative abilities have barely been tapped. [4.13]
7. There are times when you feel your life is one long battle. You become overwhelmed with your responsibilities, and lack the focus you once had. If you concentrate on those jobs that are really important, you can live through these phases. [3.79]
8. Your life hasn't developed exactly the way you expected or would have liked. Many of your goals and plans have failed to materialise. [2.50]
9. Relationships have not always been as easy as you would have liked. You are a good friend once people get through, but there is a reserve present, and I sense that you would rather have one or two close friends than a room full of acquaintances. [4.13]
10. You don't mind solitude at times. In fact you really benefit from time on your own. It gives you a chance to work things out and put things into perspective. [4.58]
11. You do best when working for yourself, or in a situation where you are entirely left to get on with it. [3.79]
12. You seem to know yourself pretty well, and have few illusions about what you are capable of. At times, you do dream about all the things you would like to be and do, but you do know inside yourself which of these are possible and which are flights of fancy. [4.21]
13. You are not so open as you used to be, not as ready to share with just anyone everything about your inner self as you once were. I think you've seen how that can backfire sometimes. Some of these experiences are even now still too uncomfortable to sit around and remember. [3.71]
14. There is a strong urge in you to be in control of your own destiny. You want to make sure that things work out the way you want them to. You don't like being along on someone else's ride. You would rather have your options open, be able to choose as you wish, and not have to depend on other peoples' schedules. [4.38]
15. You are still affected by a recent argument with someone. [3.58]
16. You have a pleasant personality. [3.95]
17. You are above average in intelligence. [4.18]
18. You appreciate lovely things, and may even be a bit of a collector. [3.55]
19. You are basically a friendly person and have many acquaintances but few close friends. There is a long-lasting relationship with one person in particular. [3.77]
20. You need to try and relax more than you do. Your life seems to be running at such a hectic pace. Try to get things in the proper perspective. [3.50]
21. You tend to put off chores which must be done but do not particularly interest you. You find yourself rushing and frequently face frustration with all the little things which have to be done. You need to learn how to better apportion your time and energies. [3.68]
22. You have often dreamed of visiting strange and exotic lands. [4.18]

23. You tend to act before thinking things through. You often spend money on things you don't need, and feel sorry later. [3.14]
24. You sometimes feel as if you attract the wrong sort of person. Others have got you into trouble more than once. [2.50]
25. You give the impression of being a sensible person, with your feet firmly rooted to the ground. There are times when you can get a bit carried away, but basically you live in this world. [4.27]
26. You are good with people, and would be excellent at dealing with the public (if you don't already do this), but you do also need some time to yourself. [4.32]
27. There is a woman in your past who has had a strong influence on you. The way she lived her life, some of the things she said, affected the way you have come to view parts of your life as well. [3.18]
28. In your past there has been a brush with death, either for you personally, or someone close to you. [3.00]
29. You are the sort of person who doesn't always speak up when you think you should. You may take some bad treatment from someone and you let it go, unwilling to start a screaming battle over some small but stupid, annoying or unfair incident. But then you can be pushed too far and just 'explode' over something just as trivial, because you've been saving up all that feeling. You need to speak up sooner, stop yourself feeling moody or guilty because of the way others have behaved. Don't let them control you like that. [4.41]
30. You seem to be preoccupied with money matters, perhaps concerning a recent hitch in finances. [3.14]

Barnum statement set

1. You have a tendency to be critical of yourself. [4.45]
2. You like to be with people, especially to mix with those you know well. [4.61]
3. You pride yourself as an independent thinker and don't accept others' statements without satisfactory proof. [4.13]
4. You occasionally get depressed, but you couldn't be called moody. [3.96]
5. You tend to be fairly normal in your attitudes and behaviour. [3.86]
6. You are usually outgoing and friendly, although at times you can be wary and reserved. [4.22]
7. Sometimes you have difficulty in concentrating. [4.15]
8. You secretly wish you had a better developed and healthier body. [3.84]
9. While you have some minor personality weaknesses, you are generally able to compensate for them. [4.17]
10. You prefer a certain amount of change and variety, and become dissatisfied when hemmed in by restrictions and limitations. [4.05]
11. Your hopes and ambitions tend to be fairly realistic. [3.70]
12. You are occasionally bothered by minor physical ailments such as headaches, but they seldom get you down. [4.24]
13. Usually disciplined and self-controlled outside, you can sometimes be feeling worrisome and insecure inside. [3.71]
14. Your sexual adjustment has caused only minor problems to you. [3.49]
15. There are times when nothing seems to please you. [3.72]

Pseudosensitifs & Effet Barnum

Résumé: La présente étude examine si les déclarations formulées par les pseudosensitifs durant leurs lectures apparemment psychiques sont acceptées comme vraies par les clients du fait de l'Effet Barnum. On a mélangé du matériel verbal emprunté à la littérature pseudosensitive à des déclarations classiques Barnum que l'on a fourni à 44 sujets comme feedback d'une mesure projective effectuée plus tôt. Les sujets ont évalué à quel point les déclarations étaient exactes en tant que description d'eux-mêmes. La comparaison de la performance des deux types de déclarations a montré que les items Barnum étaient les plus fortement acceptés ($W = 75$, $p < .0005$, bilatéral), mais que l'acceptation des deux types d'item covariait parmi les sujets ($r_s = .597$, $p < .0001$, unilatéral). On suggère qu'il est improbable que cela soit dû à une susceptibilité différentielle à des caractéristiques de demande de la tâche. On tente de rendre compte de ces découvertes en proposant qu'un sous-ensemble particulier de déclarations pseudosensitives qui n'a pas induit d'acceptation a pu servir à diminuer la performance de l'ensemble comme un tout. On a caractérisé ce sous-ensemble comme étant moins général ou favorable dans sa forme que ce qui est habituellement nécessaire pour induire l'Effet Barnum.

Os pseudo-paranormais e o efeito Barnum

Resumo: Este estudo analisa se o que os pseudo-paranormais dizem em suas supostas sessões paranormais é aceito como certo por seus clientes devido ao fato de que os paranormais utilizam o Efeito Barnum. Juntou-se material retirado da literatura pseudo-paranormal a outros relativos a afirmações Barnum clássicas que foram administradas a 44 sujeitos como *feedback* dos resultados de um teste que eles haviam realizado anteriormente. Os sujeitos avaliaram em que grau eles sentiam que as afirmações eram precisas no que tange às suas descrições. Ao comparar ambos os grupos de afirmações verificou-se que as afirmações Barnum tiveram mais aceitação entre os sujeitos ($W = 75$, $p < .005$, bi-caudal), mas que a aceitação destes dois grupos de afirmações co-variaram entre os sujeitos ($r_s = .597$, $p < .0001$, mono-caudal). Sugere-se que é pouco provável que isto possa ser explicado devido às diferenças de susceptibilidade às características demandadas. Trata-se de explicar estes resultados propondo que um sub-grupo das afirmações pseudo-paranormais que não foram aceitas podem ter causado a diminuição da efetividade desse grupo como um todo. Este sub-grupo caracterizou-se por ser menos geral ou favorável em relação ao que é geralmente necessário para provocar o Efeito Barnum.

Pseudopsíquicos y el Efecto Barnum

Resúmen: Este estudio considera si lo que los pseudopsíquicos dicen en sus supuestas sesiones psíquicas es aceptado como cierto por sus clientes debido a que los psíquicos usan el Efecto Barnum. Se juntó material tomado de la literatura pseudopsíquica con material sobre afirmaciones Barnum clásicas y se le administró a 44 sujetos como si se les estuviese informando sobre los resultados de una prueba proyectiva que ellos habían tomado anteriormente. Los sujetos evaluaron el grado en el cual ellos creían que las afirmaciones eran correctas en términos de describirlos a ellos (a los sujetos). Al comparar ambos grupos de afirmaciones se encontró que las afirmaciones Barnum resultaron tener más aceptación entre los sujetos ($W = 75$, $p < .0005$, 2 colas), pero que la aceptación de estos dos grupos de afirmaciones covariaron a través de los sujetos ($r_s = .597$, $p < .0001$, 1 cola). Se sugiere que es poco probable que esto pueda explicarse debido a diferencias de susceptibilidad a características demandadas en este contexto. Se trata de explicar estos resultados proponiendo que un subgrupo de las afirmaciones pseudopsíquicas que no fueron aceptadas pudieron haber causado la disminución de la efectividad de este grupo de afirmaciones. Este

subgrupo estaba caracterizado por ser menos general o favorable en forma de lo que es usualmente necesario para provocar el Efecto Barnum.

Pseudo-psychics en het Barnum-effect

Samenvatting: De auteur heeft onderzocht of uitspraken van pseudo-begaafden in zogenaamde "psychic readings" door de vragensteller als correct worden beschouwd omdat die nepbegaafde het Barnum-effect uitbuit. Uitspraken uit literatuur van pseudo-psychics werden gemengd met klassieke Barnum-uitspraken. Die combinatie werd vervolgens aangeboden aan 44 proefpersonen (ppn) onder het mom van feedback over een eerdere projectieve test. De ppn gaven op een schaal aan hoe goed de uitspraken hen beschreven. Vergelijking van beide sets uitspraken toonde aan dat de Barnum-uitspraken als de beste werden beschouwd ($W=75$, $p < 0,0005$) en tegelijk dat er een covariantie was van de beoordeling van beide typen uitspraken over de ppn ($r_s=0,597$, $p < 0,0001$). Het lijkt onwaarschijnlijk dat dit een gevolg is van een verschillende ontvankelijkheid voor het type vraagstelling. De auteur probeert het resultaat te verklaren met het idee dat een subset met opvallende uitspraken van een pseudo-psychic de beoordeling van de hele set in negatieve zin heeft beïnvloed, omdat die subset minder aanleiding gaf tot een beoordeling als correcte uitspraak. Uitspraken in die subset bevatten een minder algemene of minder positieve beschrijving dan meestal nodig is om het Barnum-effect op te wekken.

Pseudo-Medien & der Barnum-Effekt

Zusammenfassung: Die vorliegende Untersuchung befaßt sich mit der Frage, ob Aussagen, die von Pseudo-Medien in vorgeblich paranormalen Readings gemacht werden, von Klienten als wahr akzeptiert werden, weil sich diese Aussagen den Barnum-Effekt zunutze machen. Material aus der Literatur über Pseudo-Medien wurde mit klassischen Barnum-Aussagen vermischt und 44 Personen als angebliches Feedback über zuvor erhobene Ergebnisse projektiver Tests präsentiert. Die Versuchspersonen stuften die Aussagen nach dem Grad der Übereinstimmung mit ihrer jeweils eigenen Person ein. Ein Vergleich zwischen den beiden Aussage-Typen zeigt, daß die Barnum-Aussagen die am stärksten akzeptierten waren ($W = 75$, $p < .0005$, zweiseitig), aber daß die Akzeptanz der beiden Typen über die Gruppe der Versuchspersonen kovarierte ($r_s = .597$, $p < .0001$, einseitig). Vermutlich hat dies wohl nicht an unterschiedlichen Empfänglichkeiten für Demand-Charakteristika gelegen. Es wird versucht, diese Ergebnisse durch die Mutmaßung plausibel zu machen, daß eine Untergruppe weit hergeholter pseudomedialer Aussagen, die keine Akzeptanz gefunden haben, vielleicht dazu gedient hat, die Leistungsfähigkeit der gesamten Aussage zurückzudrängen. Diese Untergruppe wurde als weniger allgemein gehalten oder günstig beschrieben als normalerweise erforderlich ist, um den Barnum-Effekt auszulösen.

Pseudosensitivi ed effetto-Barnum

Sommario: Lo studio ha verificato se le affermazioni formulate da pseudosensitivi in apparenti esperienze di sensitività vengono prese per vere dai clienti perché si produce un effetto-Barnum. Materiale tratto dalle produzioni di pseudosensitivi è stato mescolato a classiche affermazioni Barnum e dato a 44 soggetti facendolo passare per il risultato di un test proiettivo condotto in precedenza. I soggetti dovevano esprimere con un voto in che misura ritenevano le affermazioni accurate nel descriverli. Confrontando i punteggi ottenuti dai due tipi di materiale si è riscontrato che le affermazioni Barnum erano le più accettate ($W=75$, $p < 0,0005$, a due code), ma che

l'accettazione dei due tipi di responsi covariava nei soggetti ($r_s=0,597$, $p < 0,0001$, a una coda). Si ipotizza che non è probabile che ciò avvenisse per la diversa suscettibilità alle varie caratteristiche. Si tenta invece di spiegare simili dati proponendo che un sottogruppo di apparenti affermazioni di pseudosensitivi che non ha indotto accettazione possa aver abbassato il punteggio dell'intero materiale di questa classe. Il sottogruppo di affermazioni era caratterizzato dall'aver una forma meno generica o favorevole di quanto è generalmente necessario per indurre l'effetto Barnum.