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Lay Theories of Psychotherapy II: The Efficacy of Different Therapies and Prognosis for Different Problems

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This study concerns the structure and correlates of lay people's perceptions of the efficacy of different types of "psychological" therapies and the prognosis of various psychological problems. Two hundred lay people completed two questionnaires, the first examining their perceptions of the efficacy of 22 different types of psychological treatment. The second questionnaire required them to rate the perceived prognosis for 36 different and relative common psychological problems derived from (with definition) the DSM III. Both questionnaires had a relative simple and interpretable factor structure not dissimilar to that emerging from related studies. Although sex, age, and education of the subjects was related to their beliefs about both efficacy and prognosis, the best predictor was their experience of, and knowledge about psychology. These results are discussed in terms of the literature on lay theories of psychotherapy and treatment. Limitations of the study are also discussed.

KEY WORDS: lay theories; psychotherapy; health.

INTRODUCTION

This study is part of a programmatic series of studies aimed at examining lay peoples, i.e., potential clients, theories of psychotherapy (Furnham & Wardley, 1990). Over the past 20 years, there has been a growing and significant literature on lay theories of psychological processes, and this study is in that tradition (Robbins, 1981).

Early work in this area was specifically concerned with the *structural* representation of lay theories of *psychopathology* (Fisher & Farina, 1979; Horowitz, 1979). The work of Rosenberg (Rosenberg & Cohen, 1977; Rosenberg & Gara, 1985) has been concerned with the search for a simple

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and interpretable structure of lay theories of psychopathology and psychotherapy. The methods employed to "uncover" lay theories of psychopathology have been numerous. For instance, Messick and Jackson (1972) asked 150 students whether the 566 MMPI items reflected a desirable or undesirable characteristic of the person. These were then subjected to a factor analysis and ten identifiable factors emerged. They were: denial of lack of somatic control, impulsivity vs. religious preoccupation, femininity, tolerance of deviance, oversensitivity and fearfulness, socially deviant attitudes, impulse acceptance vs. grandiosity, listless distractibility, worry, and timid cautiousness vs. masculine adventuresomeness. Cox, Costanzo, and Coie (1976) asked 241 adults to rate 190 MMPI from 25 scales items on a three-part scale of mental illness concern. The acceptable coefficient alpha estimates of the different scales suggested popular conceptions of mental illness much in line with those of "experts."

In a methodologically-advanced study, Chan and Jackson (1979) used multidimensional scaling to examine the judgments of 130 students of pairs of personality items from the Differential Personality Inventory. In all, three bi-polar dimensions emerged: controlled impulse expression vs. inhibition and withdrawal, cognitive dysfunctionary vs. overcontrol and denial, and resignation vs. interpersonal conflict. A statistical comparison of the structures emerging from the lay perceptions and that derived from a factor analysis of the scale suggested that lay or implicit theories possess some validity. "The evidence at this point implies that the implicit theory of psychopathology may contribute an accurate component to the judgment of psychopathological traits in others, and that people can predict unobserved psychopathological traits of others from inferentially-related behaviour that is observed" (p. 18).

This study is, however, concerned with lay people's beliefs and understanding of psychotherapy. It is specifically concerned with a topic about which there seems to be almost no research—potential patient's belief about the efficacy of different therapies and their prognosis for different problems. While studies have looked at clients expectations of counseling, few have looked at the topic of this study.

Tinsley and Harris (1976) used a questionnaire to investigate student expectancies of counseling. The strongest expectancies found were of seeing an experienced, genuine expert and accepting a counselor they could trust. Tinsley et al. (1988) reviewed and assessed investigations in which clients' expectations for counseling or psychotherapy were manipulated. Researchers have argued clients approach therapy with expectations regarding the nature of therapeutic interview and the roles they and their counselors/therapists will assume. It has also been argued that clients' expectancies may either facilitate or hinder the communication process and the process and the ef-

fectiveness of therapy. For instance, expectancies influence choice of help giver, what attracted research in the relation between the expectancies and help-seeking behavior (Parham & Tinsley, 1980). Expectancies may be related to persistence in therapy, and client's decision to discontinue therapy after the initial interview may result largely from a discrepancy between client expectations of therapy and what actually happens. Further, assuming a client stays in therapy, expectancies may be important determinants of the effectiveness of therapy. The ultimate goal in this line of research is to enable therapists to influence client's expectancies in order to produce a more beneficial result from treatment. These client expectancies may be seen to result from the more general theories that lay people have of psychotherapy.

There remains an active interest in lay health beliefs about *physical* illness, yet far less attention has been paid to beliefs about *mental* illness (Furnham & Smith, 1988; Helman, 1986; King, 1983). While it is true that there have been some studies on lay theories of alcoholism (Furnham & Lowick, 1984), depression (Brewin & Furnham, 1986; Rippere, 1981), neuroticism (Furnham, 1988), and schizophrenia (Furnham & Rees, 1988), there remains little research in lay theories of the cure of mental illness (Furnham & Henley, 1988; Henley & Furnham, 1988). In a related study, Furnham and Wardley (1990) looked at lay people's attitudes to, and beliefs about psychotherapy. They found an interpretable structure underlying these and that, by-and-large, lay people seemed optimistic about the benefits of psychotherapy. They tended to believe that psychotherapy clients benefitted a great deal from psychotherapy. Age and education were related to many of these beliefs but the one fact that, predictably was most closely related to lay theories about psychotherapy was people's experience of psychology either directly or vicariously through books. The "experience of psychology" was a composite variable made up of various questions.

This study concerned lay people's beliefs about two quite specific aspects of psychotherapy. The first were their beliefs about the efficacy of different therapies to treat a wide range of psychological illnesses. There is a bewildering range of "psychological" therapies available and one factor that lay people have to consider in "shopping" for different therapies is the efficacy of the theory in "curing" many specific or few psychological problems. The second aim of the study was concerned with lay people's perception of the prognosis of various psychological illnesses. Clearly beliefs about prognosis (good or bad) will affect people's expectation of therapy and indeed whether they choose to or not to undergo therapy. Various hypotheses were formulated mainly on the basis of pilot interviews and the study of Furnham and Wardley (1990) which looked at a related issue.

It was expected that the factor structure of the two questionnaires would be clearly interpretable, in that the therapies would fall into quite

distinct clusters and the illness would do likewise. It was also expected that the two dimensions to emerge would correspond to humanistic-talking therapies and the biological-behavioristic approaches for the therapies. Lay people seem to make the distinction between psychological and medical therapies (Furnham, 1988). Second, it was predicted that various individual difference factors specially age and education, particularly *experience or knowledge of psychology* would be clearly related to the factors emerging, such that the more a person knows about a discipline the more they would be skeptical about therapy and pessimistic about progress. Furnham and Wardley (1990) found these three variables closely correlated with attitudes toward, and beliefs about psychotherapy and therapists.

METHOD

Subjects

Two hundred subjects took part in this study, of which 84 were male and 116 female. They ranged in age from 17–76, the mean being 27.7 years (SD = 13.3 years). Eighty percent (160) had completed secondary school but obtained no further qualifications, while 20% (40) had completed university education, some of which had postgraduate qualifications. They came from a variety of occupations, though over 50% were in full-time education (but not studying psychology). Subjects were divided initially into various groups for analysis, i.e., students vs. non students, but as no fundamental or significant differences occurred the results were pooled. This was even true of the "experience of psychology" as the students were not psychology students. Most (59.5%) were nominal Christians, but 29% claimed to be agnostic. In all 149 were single, 46 married, and five divorced. Subjects were predominantly lower-middle and middle class. They were obtained from two sources. About half were recruited from a university subject panel. The remainder (about 40%) were recruited in doorstep interviews in three towns in the south east of England. Though this is a substantial sample, it is not a stratified or quota sample from the population as a whole. Thus, while the results might not be representative of the total lay sample, there is no reason to believe that they were systematically biased. They were also asked various questions about psychology and psychotherapy and the results are given below. It was thought that these six questions, although interrelated, would tap into subjects experience of and exposure to psychological issues in general. However, it should be pointed out that these questions indicate more about the *quantity* than the *quality* of experience of psychotherapy.

	Yes(%)	No(%)
A. Have you ever read books about psychology/ psychotherapy?	59	41
B. Have you ever been to see a psychotherapist?	15	85
C. Have you ever thought about going to see a psychotherapist?	27.5	72.5
D. Do you know people who have received psychological help?	62.5	37.5
E. How many psychologists can you name? (They were required to write in the surname of any living or dead psychologist) (none-35, one-11.5, two-9.5, three-6.5, four-9.0, and five-28.5%)		
F. Do you think you know the difference between a psychologist, psychiatrist, and psychoanalyst?	55	45

The co-efficient alpha for this "experience of psychology" measure was 0.87.

Questionnaire

This consists of two parts. It was devised with the help of three academic clinical psychologists, a professor of psychoanalysis, and extensively piloted for its clarity and comprehensiveness. This panel eventually decided on the inclusion and description of both the cures and the "psychological problems."

1. The Efficacy of "Psychological Cures." Subjects were presented with a list of 22 different psychological techniques plus a one to two sentence description of each. The list and the descriptions were taken from a number of introductory text books on abnormal psychology. It is probably fair to point out that some of these therapies, i.e., impulsion therapy, chemotherapy, megavitamin therapy, psychosurgery, were rarely used, while one or two well-established schools of therapy were not included (like family therapy). The list attempted to be comprehensive covering all major (and some minor) therapies available. They were given the following instructions:

> There are a very large number of cures available from "talking cures" to drug therapy or even surgery. Some of these cures have been applied only to specific psychological problems like schizophrenia while for some problems like alcoholism a very large number of cures have been tried. Some people believe that certain cures work for nearly all problems while others believe that they are completely ineffective. Of course some people argue that one type of cure works well for one problem but not another. This questionnaire lists some of the more common psychological therapies used today with a very brief description concerning what each involves. We want you to indicate how effective you believe each "cure" is for psychological problems in general. If you think the cure is effective for nearly all or very many psychological problems, circle 5 or 4, but if you think the cure is rarely or never effective circle 2 or 1.

It could be argued that some "cures" are not really therapeutic approaches, i.e., psychotherapy, while "role-playing" is a technique which is used by many therapeutic approaches. While every attempt was made to distinguish schools of psychotherapy with techniques, it is possible that this may have occurred in the minds of some respondents.

2. Prognosis for Psychological Problems. Subjects were given a list of 36 "psychological problems" presented in alphabetical order from agoraphobia to tics, with brief descriptions of the nature of the problem, i.e., fetishism-sexual excitement over non-living objects. The list was derived from DSM III and included most of the "relatively" well-known psychological problems. It is true that the list contained disorders that are quite similar symptomatically, but this allows for validity checking. Three lay people were given the DSM III list and they ticked off those that they had heard of, and from this data the final list was derived. They were given the following instructions:

> When a doctor says this disease has a poor prognosis, he or she means the probability of people recovering is not good. On the other hand a good prognosis means that people are likely to recover. Thus the prognosis for the common cold is good (people nearly always recover relatively quickly) while the prognosis for some type of cancer is very bad (people nearly always get rapidly worse and die). This part of the questionnaire is about how good or bad you think the prognosis is for various psychological problems. Read the following list of psychological and behavioural difficulties and rate each according to how often and easily people recover (Good Prognosis) to how little people recover (Bad Prognosis). The higher the number you ring, the better chance you think people have of being cured, the lower the number you ring the less chance you think they have of being cured. If you have never heard of the problem, or are not sure of what it is Code O.

Procedure

Subjects who were all volunteers, were tested in a variety of settings. Some were conducted in door-to-door surveys in South East England (about 40%) while others tested at their place of work (about 20%), while yet others were tested in educational settings (about 40%). Very few refused (about 8%); there was a minimal number of uncompleted or spoiled questionnaires (about 10%) and many subjects expressed considerable interest in the study.

RESULTS

The Experience of Psychology

Subjects were asked six questions about their "experience" of psychology (see subjects section). In order to get a single robust measure, these

variables were intercorrelated. All the variables were significantly correlated (Furnham & Wardley, 1990). Predictably the highest correlation was between the questions on whether people had ever *been* to a psychotherapist and whether they had ever thought of going to a psychotherapist. However, the size of the correlation indicates that a fairly significant number of people who thought of going to a psychotherapist never had. The pattern of negative correlations associated with can you name five psychologists occurred because the more actual well-known psychologists people could name, i.e., Freud, Jung, Skinner, Eysenck, the less likely they were not to read books, see a psychotherapist, etc. Once the scores were appropriately reversed, these five scores were arithmetically combined to form a single "psychological experience" factor such that the *higher* the score the *less* experience and knowledge of psychology the subject had.

The Efficacy of Psychological Cures

Table I shows the means, standard deviations, and factor loadings for the 22 therapies. The therapies thought to be most efficacious were psychotherapy, systematic desensitization, and group therapy while the least efficacious were judged to be psychosurgery, electroconvulsive therapy, and primal scream therapy. No doubt psychotherapy was perceived as the most efficacious because it seems to "contain" other cures, though not all lay people know this.

Table I shows the results of the factor analysis. A VARIMAX rotation was performed and the scree test used to determine the number of factors extracted (Messick & Jackson, 1972). Six factors emerged with eigenvalues of 1.00 or above all of which accounted for at least 5% of the variance. The first factor had six items loading .40 and above and accounted for nearly a fifth of the variance. It was labeled *cognitive therapies* because most therapies loading on it were essentially cognitive. Essentially, these therapies represent the Rogerian and humanistic views. The second factor had four items loading on it and was labeled *behavioral therapies,* all the therapies related to the biological or behaviorist perspective. The third factor had four items loading highly upon it and was labeled *physical therapies* as all four involved medical/physical methods (chemotherapy, megavitamin, psychosurgery, and electro-convulsion therapy). The fourth factor was labeled *psychodynamic therapies* and had just two items loading on it, psychotherapy and psychodynamic therapy. The fifth factor had three items loading on it, gestalt, rebirth, and hypnosis, and was labeled *regression.* Finally, the final factor was labeled *feedback* because of the items loading upon it seemed concerned with feedback.

Table I. The Means, Modes, Standard Deviations, and Factor Loadings from a VARIMAX Analysis of Section 2: 22 Ratings of Cure Effectiveness[a]

Cures	Mean	SD	Mode	C1	C2	C3	C4	C5	C6
5. Psychotherapy	3.93	0.68	4.00	.31	-.14	-.09	.73	-.12	.16
7. Systematic desensitization	3.71	0.77	4.00	.11	.11	-.05	.19	.01	.43
21. Group therapy	3.60	0.83	3.00	.18	-.04	.02	.05	.10	.70
13. Assertiveness training	3.61	0.75	4.00	.74	.18	-.02	.05	-.12	.19
17. Existential therapy	3.41	0.88	3.00	.63	.04	-.08	.29	.28	.12
16. Non-directive therapy	3.31	0.89	3.00	.63	.23	.00	-.13	.15	-.18
18. Gestalt therapy	3.25	0.85	3.00	.40	-.19	-.03	.09	.45	.23
14. Rational-emotive therapy	3.25	0.88	3.00	.71	-.09	.03	-.13	.13	.18
6. Psychodynamic therapy	3.16	0.84	3.00	.02	.14	-.12	.78	.23	.01
15. Thought stopping therapy	3.15	0.78	3.00	.68	-.09	.10	.16	.07	.13
19. Hypnosis	3.05	0.89	3.00	.02	.13	.11	.08	.74	.21
8. Implosion therapy	2.99	0.79	3.00	.01	.02	-.03	-.04	.09	-.01
20. Biofeedback	2.95	0.88	3.00	.30	.14	.07	-.05	.21	.56
9. Aversion therapy	2.94	0.88	3.00	-.00	.40	.19	.28	.07	-.04
1. Chemotherapy	2.83	0.81	3.00	-.15	.14	.55	.08	.01	.32
10. Token economies	2.67	0.99	2.00	-.09	.65	.02	-.13	.08	-.08
12. Model/role playing	2.63	0.92	3.00	.00	.73	.13	.17	-.02	.37
11. Behavior contracting	2.33	0.89	3.00	.19	.77	.04	-.05	.09	-.04
4. Megavitamin therapy	2.44	0.91	3.00	.07	-.08	.40	.46	.15	-.18
3. Psychosurgery	2.18	0.05	2.00	.06	-.07	.78	.03	-.04	.11
2. Electroconvulsive therapy	2.00	0.95	2.00	.07	.20	.75	-.13	.05	-.24
22. Primary scream (rebirth) therapy	1.94	0.89	2.00	.15	.07	-.05	.05	.74	-.03
Eigenvalue				4.02	2.35	1.61	1.44	1.31	1.21
Variance (%)				18.3	10.7	7.3	6.6	6.0	5.50

[a]Cures rated on a scale from 5 = cures almost all problems to 1 = cures no problems.

Items that loaded 0.40 or above on any factor were arithmetically computed so that each subject had a total of six scores for this section of the questionnaire.

The Prognosis of Psychological Problems

Table II shows the means standard deviations and factor loadings for the 36 psychological problems. The prognosis for enuresis was thought to be particularly good, followed by insomnia, agoraphobia, and sleep disorders. On the other hand, the prognosis for dementia, homosexuality, and senile dementia was thought to be very poor.

Table II shows the results of the VARIMAX rotated factor analysis using the scree test as before. It should be remembered that the factor analysis is being done not in terms of symptomatology or aetiology but

Table II. Mean, Modes, Standard Deviations, and Factor Loadings from a VARIMAX Analysis for Section 3: Subjects' Ratings of Prognosis from 36 Psychological Problems[a]

Problems	Mean	SD	Mode	D1	D2	D3	D4
13. Enuresis	5.35	1.47	6.00	.68	.09	.15	.25
24. Insomnia	4.87	1.40	5.00	.60	.16	.18	.29
1. Agoraphobia	4.85	1.25	5.00	.40	.28	.11	.39
31. Sleep disorders	4.79	1.38	5.00	.67	.19	.30	.11
12. Depression	4.75	1.33	5.00	.58	.35	.25	.10
30. Phobias	4.74	1.48	5.00	.50	.03	.40	.09
19. Hyperactivity	4.69	1.49	5.00	.43	.25	.03	.18
5. Anxiety/panic attacks	4.61	1.35	5.00	.60	.15	.37	.42
17. Fridgidity	4.58	1.42	5.00	.50	-.02	.30	.11
25. Impotence	4.58	1.62	5.00	.57	.06	.09	.15
27. Neurosis	4.45	1.31	5.00	.53	.33	.54	.07
21. Hypochondrisis	4.43	1.38	5.00	.29	.04	.65	.08
32. Stuttering	4.39	1.61	5.00	.27	.17	.00	.05
7. Compulsive behaviors	4.31	1.55	5.00	.21	.22	.53	.47
23. Kleptomania	4.30	1.45	5.00	.39	.07	.17	.53
18. Compulsive gambling	4.29	1.36	5.00	.37	.21	.19	.25
2. Alcoholism	4.28	1.54	5.00	.28	.55	-.07	.12
8. Conduct disorders in kids	4.22	1.49	4.00	.23	.29	-.05	.63
14. Exhibitionism	4.22	1.77	5.00	.19	.27	.31	.67
28. Obsessional thoughts	4.15	1.55	4.00	.39	.29	.61	.09
3. Anorexia	4.13	1.57	4.00	.19	.67	-.10	.24
20. Hysteria	4.09	1.59	5.00	.19	-.03	.51	.28
9. Delusions	4.04	1.58	4.00	.16	.29	.18	.48
33. Suicide attempts	3.92	1.52	4.00	.01	.26	.40	.21
29. Paranoia	3.86	1.43	3.00	.21	.52	.56	.13
11. Drug dependence	3.72	1.51	5.00	.13	.36	.30	.32
35. Schizophrenia	3.61	1.44	2.00	.11	.64	.36	.09
26. Manic-depression	3.61	1.64	5.00	.23	.81	.12	.15
16. Fetishism	3.59	1.79	4.00	.25	.22	.53	.49
4. Amnesia	3.57	1.59	3.00	.36	.33	.12	.46
36. Nervous tics and twitches	3.27	1.49	3.00	.35	.16	.09	.06
6. Childhood autism	2.86	1.79	2.00	.01	.71	.27	.21
15. Epilepsy	2.85	1.64	2.00	.11	.34	.14	.13
10. Dementia	2.01	1.29	2.00	.08	.58	.23	.31
22. Homosexuality	1.79	1.35	1.00	.08	.11	.19	.14
34. Senile dementia	1.61	1.04	1.00	-.01	.56	.34	.15
Eigenvalue				15.32	2.32	1.58	1.37
Variance (%)				42.6	6.4	4.4	3.8

[a]Prognosis rated on the scale 7 = good prognosis, 1 = poor prognosis.

prognosis, hence a standard clinical taxonomy was thought unlikely to occur. Four factors emerged with eigenvalues of > 1.00 which accounted for about 60% of the variance though it could be argued that only one major factor emerged from this analysis. At first glance, the first and third factors appeared to be associated with neurotic disorders and the second and fourth, psychotic disorders. Also the problems that loaded on the first fac-

tor were perceived as having a good prognosis, while those that loaded on the second factor were perceived as generally having a poor prognosis. The first factor which accounted for over 40% of the variance was labeled *general anxiety* because of the high loading of certain items such as anxiety/panic attacks (.60), enuresis (.68). The second factor which clearly referred to numerous serious psychotic illnesses was labeled *serious cognitive disturbance.* The third factor which accounted for just under 5% of the variance was labeled *obsessionality* and the final factor which had eight items loading on it (> .40) was labeled *personality disorders.* Although this factor structure does not follow the established nomenclature it is quite interpretable. Again, items loading 0.40 or above on a factor were added together to provide each subject with four scores, one for each factor.

Demographic Correlates of the Ten Factors

The ten combined factor scores were then correlated with the sex, age, education, and psychological experience of the subjects. Correlations of > .15 ($p < .001$) were taken as the minimal level in terms of variance worthy of consideration. Only one of the sex correlations reach this level ($r = -.15$, $p < .001$) indicating that females believed prognosis for serious cognitive disturbances less good than males. All the correlations with age were significant but none reached the prescribed level. Two correlations between education and the factors reached significance: Better educated people thought hypnosis ($r = -.15$) and group feedback ($r = -.17$) less effective than poorly educated people. However, seven of the correlations between "psychological experience" and the various factors proved significant. They indicated that the *less* psychological experience one had the *more* subjects believed in the general efficacy of cognitive therapies ($r = .24$), physical therapies ($r = .15$), psychodynamic therapies ($r = .22$), hypnosis ($r = .27$), and group feedback ($r = .19$). However, subjects with *less* psychological experience tended to believe the prognosis for general anxiety problems was worse ($r = -.15$) but that prognosis for serious cognitive problems better ($r = .15$) than did subjects with more psychological experience.

Canonical Correlations

In order to examine the relationship between the ten belief variables and the four "demographic" variables, a canonical correlation was performed. Canonical variates are interpreted in terms of the strength of the loading of factors/items on the variates. It was necessary to consult both the means and the correlational matrix to "interpret" the results of others canonical analysis.

Table III. Canonical Correlations of the Independent "Demographic" Variables and the Dependent "Belief" Variables

A.	Eigenvalue	Canonical correlation	Wilks lambda	Chi-squared	Significance
	0.20	0.45	0.62	89.64	.000
	0.12	0.35	0.79	44.93	.01

B.	Beliefs	Canvar 1	Canvar 2
1.	Cognitive therapies	0.02	-0.73
2.	Behavioral therapies	0.83	-0.63
3.	Physical therapies	-0.19	0.45
4.	Psychodynamic therapies	0.40	0.74
5.	Regression	0.66	-0.32
6.	Feedback	0.45	1.45
1.	General anxiety	-0.63	0.00
2.	Serious cognitive disturbance	0.46	-0.86
3.	Obsessionality	0.01	0.73
4.	Personality disorders	-0.14	-0.31
Sex		0.08	0.51
Age		-0.09	-0.62
Education		-0.31	-0.35
Psychological experience		0.86	-0.34

Two significant variates emerged. The first variate indicated that those with *more* psychological experience tended to believe in the efficacy of behavioral therapies, but not regression and feedback, and the relatively good prognosis of general anxiety problems more than those subjects with less psychological experience. The second significant variate indicated that younger female rather than older male subjects believed more in psychodynamic group feedback rather than cognitive behavioral therapies. Thus, younger females (as opposed to older males) also tended to believe the prognosis for obsessionality was fairly good, but serious cognitive disturbances and personality disorders rather bad.

DISCUSSION

This study, was concerned specifically with lay peoples beliefs about the general applicability and efficacy of a wide variety of psychological therapies and second, the prognosis of different psychological problems. Potential clients of psychological treatment are faced with a bewildering array of therapies available, although some are clearly similar in both theory and practice. Different therapy schools may use similar techniques but

for different purposes. Presumably one of many criteria that lay people employ in choosing or recommending a therapy (apart from availability, cost, attitude to the therapist) is the perceived efficacy of the treatment for specific and general issues. In this study, subjects perceived cognitive and group therapies as most effective and the physical and surgical therapies as least effective to "cure" a wide range of problems. They were most impressed by traditional psychotherapy but least impressed by primary scream or rebirth therapy. It is of course possible that they are responding not so much to the perceived efficacy of the therapy as to their popularity or exposure among lay people or about the generality of the techniques. Furthermore, the factor analysis of these different therapies seemed relatively straightforward and interpretable though not all factors were particularly clear. However, the structure should not be overemphasized since the amount of variance explained by some factors is not large. Yet the factors that emerged were not dissimilar from those emerging in other studies (Chan & Jackson, 1979).

It was particularly interesting to note how the psychological experience factor related to these variables. The *more* experience subjects had the *less* they believed in the efficacy of most therapies especially regressional techniques but also cognitive and psychodynamic therapies to "cure" a wide range of psychological problems. It seems as if with increasing experience of psychology comes increasing scepticism (and possibly cynicism or indeed realism) regarding the efficacy or at least general usefulness of psychological therapies. This may be because most people are naively optimistic about the power of psychotherapy to cure illness. Popular portrayal of psychotherapy often emphasizes the efficacy of cure. However, the more one knows about psychological cures (and problems) the more one realizes the limited number of people and complaints than can frequently "cure" totally successfully. Indeed it may be true of medicine as well as psychology that the more one knows about disease and treatment, the more cautious and skeptical one becomes. Clearly the "experience of psychology" is a powerful predictor or determinant of lay beliefs about psychology.

The results concerning the prognosis of the 36 problems was equally interesting. Although subjects were given a brief description of each problem, some omitted to answer because they claimed not to know enough about the problem. The problem about which people know least, in terms of the percentage responding don't know, were childhood autism (9.5%), epilepsy (9.5%), hypochondriasis (8.5%), delusion (7.5%), enuresis (6.5%), and anorexia (4%). Overall, subjects seemed moderately optimistic about the prognosis of certain neurotic disorders especially enuresis, insomnia, and agoraphobia, while very pessimistic about the prognosis for epilepsy, dementia, and homosexuality. The list shown in Table II might surprise

some observers, for instance, that frigidity and impotence is so high (relatively good prognosis), while fetishism and nervous tics are so low. Certainly there would be much debate and disagreement between psychologists and psychiatrists of all persuasions concerning the rank order of items in Table II. The issue of the different ratings between lay people and therapists is actually addressed in subsequent studies on this topic.

Once again and predictably the strongest correlate of the prognosis factor was psychological experience. The results tended to indicate that psychological experience tended to be associated with beliefs in the prognosis of problems concerned with general anxiety, but beliefs about the poor prognosis of problems associated with serious cognitive problems. Most mental health practitioners would probably agree.

The canonical correlation, particularly the first variable seemed to underline these results. The more experience subjects had of psychology as measured by the six questions, the more they believed in the general efficacy behavioral techniques and the less in psychodynamic, regressional, i.e., hypnosis, and feedback techniques; and the more optimistic they were in the prognosis of general anxiety problems but the less optimistic about the prognosis of serious cognitive disturbances. It is debatable about the extent to which agreement could be found among mental health professionals regarding the above findings. It seems as if, for this sample, experience of psychology is associated with more belief in, perhaps as a consequence of understanding about, behaviorism and learning theory. Results from studies such as this beg further questions partly due to the fact that so little work has been done in this important field (Furnham, 1988; Furnham & Wardley, 1990). Questions about the comparison of lay and professional views are being undertaken in a further series of studies. However, there also remains questions as to how lay people acquire knowledge of psychological therapies and problems as well as their areas of ignorance and misinformation. Equally important is how their "theories" and ideas change as a function of experience. Clearly, this is an important issue for all people suffering from psychological problems and their beliefs about prognosis may effect whether to seek help and what sort of hep to acquire.

This study was not without its problems and limitations. The sample was not representative in terms of demographic background and was probably better educated (and more knowledgeable about psychology) than the general population. The unrepresentativeness of the sample is however less likely to affect the structure and correlates of these beliefs but would probably effect the absolute scores of the items. Also the study was unable to take into account knowledge and understanding of, as well as experience of the different therapies and problems which may be directly related to the responses. Nevertheless, the results seem to confirm those of other

studies in the field (Chan & Jackson, 1979; Fisher & Farina, 1979; Herzlich, 1973). The idea that belief about prognosis and about schools of therapy may affect potential clients expectations, choices, and indeed therapy outcomes has been at the center of this study though not all aspects could be tested. Certainly, the idea of expectations leading to fulfilling prophesies and confirming theories is not new in psychology, but as yet not empirically applied to clinical psychology. This study may be seen as a step in that direction.

REFERENCES

BREWIN, C., & FURNHAM, A. Attributional versus attributional variables in self-esteem and depression. *Journal of Personality and Social Psychology,* 1986, *50,* 1013-1020.

CHAN, D., & JACKSON, D. Implicit theory of psychopathology. *Multivariate Behavioural Research,* 1979, *14,* 3-19.

COX, G., COSTANZO, P., & COIE, J. A survey instrument for the assessment of popular conceptions of mental illness. *Journal of Consulting and Clinical Psychology,* 1979, *44,* 901-909.

FISHER, J., & FARINA, A. Consequences of beliefs about the nature of mental disorders. *Journal of Abnormal Psychology,* 1979, *84,* 327-329.

FURNHAM, A. *Lay theories: Everyday understanding of problems in the social sciences.* Oxford: Pergamon, 1988.

FURNHAM, A., & HENLEY, S. Lay beliefs overcoming psychological problems. *Journal of Social and Clinical Psychology,* 1988, *26,* 423-438.

FURNHAM, A., & LOWICK, V. Lay theories of the cause of alcoholism. *British Journal of Medical Psychology,* 1984, *57,* 319-322.

FURNHAM, A., & REES, J. Lay theories of schizophrenia. *International Journal of Social Psychiatry,* 1988, *34,* 212-220.

FURNHAM, A., & SMITH, C. Choosing alternative medicine: A comparison of the belief of patients visiting a general practitioner and a homeopath. *Social Science and Medicine,* 1988, *26,* 688-689.

FURNHAM, A., & WARDLEY, Z. Lay theories of Psychotherapy I: Attitudes to and beliefs about psychotherapy and therapists. *Journal of Clinical Psychology,* 1990, *46,* 878-890.

HELMAN, C. *Culture, health and illness.* Bristol: Wright, 1986.

HENLEY, S., & FURNHAM, A. The attribution of cure. *British Journal of Clinical Psychology,* 1988, *27,* 384-386.

HERZLICH, C. *Health and illness.* London: Academic Press, 1973.

HOROWITZ, L. On the cognitive structure of interpersonal problems tested in psychotherapy *Journal of Consulting and Clinical Psychology,* 1979, *47,* 5-15.

KING, J. Health beliefs in the consultation. In D. Pendleton and J. Hasler (Eds.), *Doctor–patient communication.* London: Academic Press, 1983.

MESSICK, S., & JACKSON, D. Lay attribution of personal problems and psychological help-seeking. *Social Psychology,* 1972, *16,* 1-9.

PARHAM, W., & TINSLEY, H. What are friends for: Students expectations of the friendship encounter. *Journal of Counselling Psychology,* 1980, *27,* 524-527.

RIPPERE, V. How depressing: Another cognitive dimension of common-sense knowledge. *Behaviour Research in Therapy,* 1981, *19,* 169-181.

ROBBINS, J. Lay attribution of personal problems and psychological help-seeking. *Social Psychology,* 1981, *16,* 1-9.

ROSENBERG, S., & COHEN, B. A method for the study of lay conceptions of psychopathology: A free response approach. *American Journal of Community Psychology,* 1977, *5,* 177-193.

ROSENBERG, S., & GARA, M. The multiplicity of personal identity. In P. Shauer (Ed.), *Self, situations and social behaviour.* Beverly Hills: Sage, pp. 87-113.

TINSLEY, H., & HARRIS, S. Client expectation for counselling. *Journal of Counselling Psychology,* 1976, *23,* 173-177.

TINSLEY, H., BOWMAN, S., & RAY, S. Manipulation of expectations about counselling and psychotherapy. *Journal of Counselling Psychology,* 1988, *35,* 99-108.

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