Lay theories of psychotherapy: perceptions of the efficacy of different ‘cures’ for specific disorders

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Abstract This study concerns the structure and determinants of lay beliefs about psychotherapy in general and specifically the effectiveness of various therapies for four different disorders. Two hundred and seventeen participants completed a two-part questionnaire. The first part was a replication of Furnham and Wardley’s (1990) ‘Attitudes to and beliefs about psychotherapy’ questionnaire, while the second part was a modified version of Furnham and Wardley’s (1991) ‘Efficacy of psychological cures’ questionnaire. Participants had to rate the effectiveness of 24 different therapies for depression, schizophrenia, delusional disorder and anorexia nervosa. The highest and lowest rated item of the first questionnaire replicated earlier findings. Participants’ efficacy ratings of the different therapies did differ markedly across the disorders. The mean ratings revealed more optimism about the ‘curability of depression’ as opposed to the other three disorders. Factor analysis of the ratings of efficacy of the 24 therapies revealed four factors: cognitive, behavioural, physical and rational. Cognitive therapies were thought most appropriate for delusional disorders, behaviour therapies for depression and physical therapies for anorexia. Results were discussed in terms of how people acquire knowledge of clinical psychological processes.

Introduction

There is a growing body of research into lay beliefs about mental illness and theories of their causes and consequences (Angermeyer & Matschinger, 1996; Angermeyer et al., 1998; Cohen & Struenig, 1962; Dammann, 1997; Furnham, 1988; Furnham & Bower, 1992; Ojanen, 1992; Oyefeso, 1994; Pistrang & Barker, 1992; Shapiro, 1995).

A series of studies has focused on lay beliefs about the best cure or ways of overcoming particular psychological problems (Knapp & Karabenick, 1985). The studies replicated both the factor structure and the cure-specific nature of the perception of the efficacy of different cures (Furnham & Henley, 1988; Henley & Furnham, 1988). More recent studies looking at a wide range of problems—neuroses (Furnham, 1997), cognitive problems (Furnham & Akande, 1997) and addictions (Furnham & McDermott, 1994)—have replicated the underlying factor structure which emphasizes self-control but also receiving professional help.

Studies have also been carried out on the general publics’ ‘mental health literacy’ with
respect to schizophrenia and depression (Jorm et al., 1997a; 1997b). Jorm et al. (1997a) found that although participants did recognize the symptoms as some sort of mental disorders, only 39% and 27%, respectively, could correctly give the psychological label (or diagnosis) to each vignette. Non-standard treatments (relaxation, vitamins and minerals, physical activity) were rated more helpful than standard psychiatric treatments like medication and admission to hospital wards, which are actually the most commonly used and yet perceived to be harmful.

Generally most members of the public believe that mental disorders are treatable (McKeen & Corrick, 1991; Reiger et al., 1988), psychiatric treatments are considered generally rather unhelpful (Reiger et al., 1988; Sims, 1993), whereas counselling is considered most helpful (McKeen & Corrick, 1991). Studies have also shown that people have set ideas about counselling before taking up therapy (Apfelbaum, 1958). Expectations have been found to be important determinants of where people turn to for help (Snyder, et al., 1972), and effectiveness of counselling (Goldstein, 1962; Pistrang & Barker, 1992).

This study is concerned with lay people’s, as potential clients, beliefs about psychotherapy. Furnham and Wardley (1990) found respondents tended to believe that clients of psychotherapy did feel better in therapy, and were more confident and hopeful. This study has been replicated by Wong (1994) and Heaven and Furnham (1994) using American college students and staff. Furnham and Wardley (1991) investigated lay theories of efficacy of therapies and prognosis for different problems. The more knowledgeable people were about psychology, the more sceptical they tended to be. Knowledge about psychological cures led to a greater awareness of the limited benefits of therapy. This was confirmed when Furnham et al. (1992) compared responses of lay adults, students and clinical psychologists and found the latter tended to be more cynical about the efficacy of therapy and prognosis of many disorders.

Thus an aim of this study addresses this topic in which participants were asked to rate the effectiveness of different therapies for four different disorders (depression, schizophrenia, delusional disorder and anorexia nervosa). The disorders used in this study were picked on the basis of being well known, with the exception of delusional disorder. This was included so that there would be two neurotic and two psychotic disorders. It was predicted that effectiveness ratings for the therapies would differ across disorders, with ‘physical’ therapies (drugs, megavitamin therapy, ECT and psychosurgery) being rated more effective for schizophrenia and possibly delusional disorder rather than depression and anorexia nervosa. As in the original study, primal scream therapy was predicted to be rated as the least effective therapy for all disorders. Next it was predicted a similar factor structure to the therapies as that found by Furnham and Wardley (1991) should emerge, namely: cognitive, behavioural, physical, psychodynamic, regression and feedback therapies.

It was also predicted that there would be a significant effect of ‘knowledge or experience’ of psychotherapy, with those who are more knowledgeable having more realistic attitudes about psychotherapy and being more sceptical about the effectiveness of therapies for the different disorders than those who are less knowledgeable. Participants were asked if they have suffered from the disorders being asked about, to see if this is a useful predictor, as indicated by Jorm et al. (1997a; 1997b). In addition, if they have had effective treatment from alternative therapies, and if not, whether they would consider it. The reason for including this is that research has shown that people who seek out alternative health practitioners are more cynical about conventional medicine (Furnham & Kirkcaldy, 1996). It was predicted that people who had effective alternative treatments or would consider them would be more optimistic about less traditional psychological therapies, like gestalt, existential, hypnosis and even primal scream therapy.
Methods

Participants

Two hundred and seventeen people took part in the study, 131 were female and 86 were male. The mean age of the sample was 27.06 years (SD = 12.56), with a range of 17–74 years. Of the participants, 78.6% had completed A-levels or some form of further education and 17.4% had completed a degree or equivalent. They came from a wide range of occupations, some skilled and some unskilled, with only 25% in full-time education. Overall, 44.4% of people were married, 3.7% were divorced, 39.8% were single and 12% were cohabiting.

Twenty-two people in the sample had suffered from a mental disorder mentioned in questionnaires, 11 (50%) of which had not sought therapy. Of the participants, 20 had had experience of therapies, 11 of these had not had any of the disorders. With regards to alternative therapy, 36 people had had effective treatment from alternative therapy, 50 people would consider it but 22 would not. Twenty per cent said yes to ‘Have you, at any time, suffered from any of the disorders mentioned in the questionnaire?’, while only 16.4% said yes to ‘Have you had experience of any of the therapies mentioned?’ A quarter of the sample said yes to ‘If not, have you ever considered going to see a psychotherapist?’ Sixteen per cent said yes to ‘Have you had effective treatment from alternative therapies, e.g. aromatherapy, homeopathy, art therapy, acupuncture, reflexology?’ Very few (4.2%) said yes to ‘If not, would you consider alternative therapies for health and/or emotional problems?’ but nearly three-quarters (73%) said yes to ‘Have you ever read books on psychology/psychotherapy?’ A third said yes to ‘Can you name any five psychologists?’, while 72.7% said yes to ‘Do you think you know the difference between a psychologist, psychiatrist and psychoanalyst?’

Questionnaire

The four-page questionnaire consisted of two parts. The first part was taken from Furnham and Wardley (1990) and is called ‘Attitudes to and beliefs about psychotherapy’. It consists of 40 statements and covers areas like the aim of therapy, the nature of client–therapist relationship, and both the client and therapist’s experience of therapy. Each statement had to be rated along a seven-point scale (7 = strongly agree, 1 = strongly disagree).

The second part is a modified version of Furnham and Wardley’s (1991) ‘Efficacy of psychological cures’. This consists of a list of 24 different psychological techniques, each one with a brief descriptive sentence. For each one, its efficacy had to be rated for four psychological disorders: depression, schizophrenia, delusional disorder and anorexia nervosa, along a five-point scale (5 = very effective, 1 = not effective). Prior to the list are four paragraphs giving the symptoms outlined by the DSM-IV of each disorder. The list of therapies differs from the original study, in that a few more were added, taken from textbooks on the various disorders, and some removed (non-directive therapy, biofeedback), still keeping a balance between well-known and more obscure therapies.

Procedure

Questionnaires were handed out in a variety of settings; work (55%), university (25%) and home (20%). Six per cent were incomplete. A quarter were obtained from university applicants who were visiting the department. Approximately another quarter were obtained from a university subject panel. The remainder were obtained by all three authors over the
course of three months. It therefore remained an expedient convenience sample rather than one selected by a scientific sampling rationale. Where possible participants were debriefed.

**Results**

*Experience of psychology questions*

The five experiences of psychology questions were intercorrelated. Six of the ten correlations were significant and four over $r = 0.35$. The highest correlation was between the number of psychologists the person could name and the number of psychology books they had read. The order in which to judge the internal reliability of the five questions in order to ascertain if they could be combined into a single score and alpha co-efficient was calculated. The alpha was too low at 0.53; however when three items were combined the alpha rose to 0.71. They were: do you think you know the difference between a psychologist, psychiatrist and psychoanalyst?; can you name any five psychologists?; have you read books on psychology?

*Attitudes to psychotherapy*

The mean response to each item (7 = strongly agree, 1 = strongly disagree) showed that the five items that elicited strongest agreement were:

- 23 The establishment of rapport is of major importance during the early phase of therapy (5.59)
- 10 Psychotherapists aim to teach self-understanding (5.58)
- 14 Psychotherapists encourage expression of repressed emotions (5.50)
- 22 Psychotherapy requires surroundings of a relaxing nature (5.08)
- 24 The work of psychotherapists consists mainly of listening (5.04)

These findings are very similar to those of both Furnham and Wardley (1990) and also Wong (1994). Three items attracted scores of less than 3.00, indicating high disagreement:

- 20 Younger, more flexible clients only benefit from psychotherapy (2.37)
- 29 Most psychotherapy clients lie on a couch (2.62)
- 6 Very often psychotherapists prescribe drugs (2.79)

Again, these results were almost identical to those of Furnham and Wardley (1990) and Wong (1994).

The 40 items were then treated to a VARIMAX rotation. Four factors emerged which accounted for nearly 45% of the variance. The first factor was labelled *negative* (eigenvalue = 3.17, variance = 18%). It resembles the factor found by Furnham and Wardley (1990), who labelled it *untrue* and Wong (1994) who called it *stereotypes*. The second factor was labelled *psychoanalytic* (eigenvalue = 2.10, variance = 13%) because of the fact that many items reflected classic Freudian beliefs about treatment (e.g. ‘Most psychotherapists ask about your dreams’; ‘Most psychotherapists believe that many psychological problems originate in childhood’ and ‘Psychotherapists encourage the expression of emotion and feelings that have long been suppressed/ repressed). The third factor was labelled *educative* because it concerned the active teaching that psychotherapists do in the course of therapy (eigenvalue = 1.91, variance 9%) (e.g. ‘A major aim of psychotherapy is to force clients to
take responsibility for the consequences of their behaviour’; ‘Psychotherapists aim to teach their clients to achieve a better self-understanding about their real motives’). The final factor was called professionalism because it focused on the professional relationship between patient and therapist (e.g. ‘Clients are encouraged to practice new coping skills in the session’; ‘It is the skills and personality of the therapist rather than the technique that they apply that most determines successful outcomes’) (eigenvalue = 1.14, variance = 4%). Eigenvalues given above refer to the unrotated factors.

Following this a series of regressions was performed regressing demographic variables (sex, age, education, religion, political beliefs) and experience of psychology onto each of the factor scores. Only the final regression on the fourth factor proved significant ($F(10,182) = 2.86, p < 0.01; R^2 = 0.14$). It showed older ($\beta = 0.18, t = 2.13, p < 0.05$), less well educated ($\beta = 0.17, t = 0.2, p < 0.05$) more religious ($\beta = 0.17, t = 2.35, p < 0.05$) and those with more experience of psychology ($\beta = 0.25, t = 3.11, p < 0.01$) endorsed this factor more.

**Efficacy of the different cures**

Table 1 shows the mean rating (5 = very effective. 1 = not effective) for each of the 24 therapies for each of the four very different conditions. For all the disorders, except schizophrenia, psychotherapy is consistently at the top or second from it. For schizophrenia, drug therapy is believed to be the most effective (M = 3.93), which is in line with Jorm et al. (1997a). Similar to Furnham and Wardley (1991), primal scream therapy was rated the least effective for each disorder, except anorexia where it was second least effective (ECT was least effective). Taking a mean of above 3.5 as most effective, schizophrenia and delusional disorder had only one (drug and thought-stopping therapy, respectively), depression had eight (psychotherapy, existential therapy, assertiveness training, group therapy, CBT, drug therapy, family therapy and interpersonal therapy) and anorexia had two (CBT and psychotherapy).

In order to examine the underlying structure of the questionnaire, a VARIMAX rotation factor analysis was computed. Each rating of each therapy was treated as a separate entry, which meant the $n$ for the matrix factor was 868 (217 participants x 4 rating = 868). This allowed for the factors being compared across the different disorders because the same rotation could be used for all further analyses. Four factors emerged with an eigenvalue above one, which accounted for nearly half of the variance, and were clearly interpretable. They roughly corresponded to those found by Furnham and Wardley (1991).

The first factor was labelled cognitive (talk therapies), such as cognitive behavioural therapy, marital therapy, assertiveness training, but also psychotherapy and psychoanalysis loaded on this single factor. The eigenvalue was 5.59 and it accounted for 23.3% of the variance. The second factor loaded on the behavioural therapies flooding, aversion therapy and token economies, and was labelled behavioural, although megavitamin therapy did also load on this factor (eigenvalue = 2.15, variance = 9.0%). The third factor involved physical interventions, either pharmacological, electrical or surgical (eigenvalue = 1.55, variance = 6.5%). The final factor was labelled rational because of its emphasis and concentration on contracting and token economies (eigenvalue = 1.24, variance = 5.2%).

Table 2 shows that participants tended to see the cognitive/talk therapies as most effective and behavioural intervention as less effective. They perceived cognitive therapies modestly effective for delusional disorders ($X = 3.40$ out of 5.00) but relatively ineffective for anorexia ($X = 2.50$). Behaviour therapies were thought most effective for depression
Table 1. Ratings of the efficacy of each therapy for each problem and factor analytic results

<table>
<thead>
<tr>
<th>Therapy</th>
<th>Depressed</th>
<th>Schizophrenia</th>
<th>Delusional disorder</th>
<th>Anorexia nervosa</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 CBT</td>
<td>3.58</td>
<td>2.63</td>
<td>3.26</td>
<td>3.50</td>
<td>73</td>
</tr>
<tr>
<td>17 Assertiveness</td>
<td>3.57</td>
<td>2.45</td>
<td>2.88</td>
<td>3.30</td>
<td>72</td>
</tr>
<tr>
<td>21 Marital</td>
<td>3.33</td>
<td>2.02</td>
<td>2.80</td>
<td>2.39</td>
<td>72</td>
</tr>
<tr>
<td>16 Existential</td>
<td>3.57</td>
<td>2.46</td>
<td>2.94</td>
<td>3.41</td>
<td>71</td>
</tr>
<tr>
<td>14 Interpersonal</td>
<td>3.53</td>
<td>2.75</td>
<td>3.07</td>
<td>3.03</td>
<td>68</td>
</tr>
<tr>
<td>22 Family</td>
<td>3.56</td>
<td>2.61</td>
<td>2.98</td>
<td>3.47</td>
<td>66</td>
</tr>
<tr>
<td>24 Gestalt</td>
<td>3.15</td>
<td>2.32</td>
<td>2.83</td>
<td>3.09</td>
<td>63</td>
</tr>
<tr>
<td>19 Group</td>
<td>3.52</td>
<td>2.60</td>
<td>3.12</td>
<td>3.12</td>
<td>62</td>
</tr>
<tr>
<td>5 Psychotherapy</td>
<td>4.01</td>
<td>2.57</td>
<td>3.31</td>
<td>4.01</td>
<td>61</td>
</tr>
<tr>
<td>13 Rational-emotive</td>
<td>2.90</td>
<td>2.47</td>
<td>3.32</td>
<td>2.79</td>
<td>56</td>
</tr>
<tr>
<td>15 Thought-stopping</td>
<td>3.14</td>
<td>2.87</td>
<td>3.50</td>
<td>3.48</td>
<td>52</td>
</tr>
<tr>
<td>18 Hypnosis</td>
<td>3.22</td>
<td>2.56</td>
<td>3.03</td>
<td>3.16</td>
<td>50</td>
</tr>
<tr>
<td>6 Psychoanalytic</td>
<td>2.90</td>
<td>2.22</td>
<td>2.60</td>
<td>2.82</td>
<td>40</td>
</tr>
<tr>
<td>8 Flooding</td>
<td>1.87</td>
<td>1.66</td>
<td>2.19</td>
<td>1.98</td>
<td>66</td>
</tr>
<tr>
<td>9 Aversion</td>
<td>1.80</td>
<td>1.64</td>
<td>1.80</td>
<td>2.09</td>
<td>64</td>
</tr>
<tr>
<td>20 Rebirth (primal scream)</td>
<td>1.52</td>
<td>1.46</td>
<td>1.48</td>
<td>1.45</td>
<td>53</td>
</tr>
<tr>
<td>7 Desensitization</td>
<td>3.13</td>
<td>2.50</td>
<td>2.94</td>
<td>2.82</td>
<td>48</td>
</tr>
<tr>
<td>4 Megavitamin</td>
<td>2.20</td>
<td>1.71</td>
<td>1.86</td>
<td>2.94</td>
<td>43</td>
</tr>
<tr>
<td>2 Electroconvulsive</td>
<td>2.01</td>
<td>2.20</td>
<td>1.84</td>
<td>1.40</td>
<td>74</td>
</tr>
<tr>
<td>1 Drug</td>
<td>3.50</td>
<td>3.93</td>
<td>2.72</td>
<td>1.88</td>
<td>67</td>
</tr>
<tr>
<td>3 Psycho-surgery</td>
<td>1.77</td>
<td>2.40</td>
<td>1.94</td>
<td>1.46</td>
<td>66</td>
</tr>
<tr>
<td>11 Behavioural contracting</td>
<td>2.06</td>
<td>2.17</td>
<td>2.22</td>
<td>2.60</td>
<td>76</td>
</tr>
<tr>
<td>10 Token economy</td>
<td>1.95</td>
<td>2.07</td>
<td>2.08</td>
<td>2.82</td>
<td>69</td>
</tr>
<tr>
<td>12 Modelling/role play</td>
<td>2.07</td>
<td>2.18</td>
<td>2.33</td>
<td>2.18</td>
<td>64</td>
</tr>
</tbody>
</table>

Note. These scores are ratings on a five-point scale. The higher the score (5.00 is maximum), the more effective the therapy is thought to be for that disorder and vice versa. The highest and lowest four scores are shown in bold.

(X = 2.20) and least for anorexia (X = 1.79). Overall, then, behavioural therapies were not thought very relevant for any of these four conditions. The efficacy of the physical therapies was perhaps the most discriminating for the participants in this study. They were thought of as fairly effective with anorexia (X = 2.84), but not at all with depression (1.57). Rational

Table 2. Means and ANOVA results for the ratings of the four types of therapy for the four different conditions. Numbers in brackets represent the average score for that factor, where 5 = very effective and 1 = not effective

<table>
<thead>
<tr>
<th>Therapy</th>
<th>Range</th>
<th>Depression</th>
<th>Schizophrenic</th>
<th>Delusion</th>
<th>Anorexia</th>
<th>Wilks Lambda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>13–65</td>
<td>42.73\textsuperscript{a}</td>
<td>39.82\textsuperscript{b}</td>
<td>44.21\textsuperscript{c}</td>
<td>32.57\textsuperscript{d}</td>
<td>99.73*</td>
</tr>
<tr>
<td>Behaviour</td>
<td>5–25</td>
<td>11.31\textsuperscript{a}</td>
<td>10.32\textsuperscript{b}</td>
<td>10.52\textsuperscript{b}</td>
<td>8.99\textsuperscript{c}</td>
<td>38.72*</td>
</tr>
<tr>
<td>Physical</td>
<td>3–15</td>
<td>4.73\textsuperscript{a}</td>
<td>6.47\textsuperscript{b}</td>
<td>7.26\textsuperscript{c}</td>
<td>8.52\textsuperscript{d}</td>
<td>131.39*</td>
</tr>
<tr>
<td>Rational</td>
<td>3–13</td>
<td>7.60\textsuperscript{a}</td>
<td>6.63\textsuperscript{b}</td>
<td>6.07\textsuperscript{c}</td>
<td>6.42\textsuperscript{b}</td>
<td>20.95*</td>
</tr>
</tbody>
</table>

Note. Means with similar superscripts are not significantly different from each other. \*p < 0.001.
therapies were perceived to be modestly efficacious in dealing with depression (2.53), but least with delusional disorders.

**Discussion**

Participants had a fairly realistic and non-stereotypic view of what occurs in psychotherapy and understood the central beneficial features of all the ‘talking cures’ (Furnham, 1996). These include the therapeutic alliance (a relationship that is characterized by acceptance, caring, respect and attention), focus on self-beliefs and emotions to promote deeper understanding, and commitment to change.

It was clear from the factor analysis of the ratings (across all four conditions) that participants did not distinguish between a range of talk therapies including psychoanalysis, gestalt and existentialist therapies, on the one hand, and group/marital therapies, on the other, as well as more social-behavioural therapies like CBT, assertiveness and thought-stopping. To the participants they all appeared to involve talk which aims to change cognitions and emotions. Yet assertiveness training and hypnosis in dealing with alcoholism are dramatically different. However the factor analytic results did reveal three other very clear factors: the classic phobia reduction behaviour therapies of flooding, aversion and desensitization were combined into one factor (along with primal scream and megavitamin therapy) as were the three ‘physical therapies’ of electroconvulsive, drug and psycho-surgery. A fourth factor combined behavioural contracting, token economy and modeling. When the results of the different therapies were examined across the four disorders, it appeared to be the case that participants clearly differentiated with regard to effectiveness. However some more unusual therapies—i.e. rebirth and aversion therapy—were considered ineffective for all four conditions specified, while group therapy was (rather oddly) seen as effective for all four.

Psychotherapy was seen as particularly effective for those depressed or experiencing anorexia nervosa. A surprisingly large number of therapies were given almost equal weight with regard to their perceived efficacy at helping depression: CBT, assertiveness training, existential therapy, interpersonal therapy, family therapy, group therapy and drug therapy. Apart from the latter, each involved fairly intensive social contact with a therapist or salient others and the possible role of social support may thus be tacitly acknowledged as highly important in that area. With only one exception (marital therapy), participants saw the therapies as nearly identical in the efficacy for dealing with depression and anorexia nervosa.

Participants saw all the talk therapies as equally ineffective for treating schizophrenia. Classical behavioural therapies, most often used to deal with phobia (aversion, desensitization, flooding) were considered ineffective with all four conditions. Patients did not rate highly the usefulness of ECT for depression despite its continued use. Psycho-surgery, now fairly rare, was considered fairly ineffective, again with the possible exception of schizophrenia. Drug therapy received the highest rating of all 24 therapies for treating schizophrenia. In fact the score (3.93) seemed to indicate that drug therapy was particularly effective at treating (stabilizing) as opposed to curing schizophrenia. On the other hand, it was perceived to be pretty useless for anorexia but as useful as CBT or group therapy for depression.

Participants clearly differentiated between the efficacy of the different therapies. Whether considered to be moderately efficacious (cognitive/talk therapies) or not, participants saw some as being significantly more appropriate than others. Thus cognition therapy was seen as efficacious for depression and delusional disorders. On the other hand, physical therapies were perceived moderately useful with anorexia but not at all for depression.
References


