Enhancing Communication Skills
and Psychological Understanding
of Patients

A Randomised Controlled Trial
with Medical Students

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ABSTRACT

The medical profession has begun to acknowledge that doctors’ communication skills are often inadequate, and that this has important consequences in regard to patient satisfaction, diagnostic accuracy, treatment compliance and treatment outcome. It has been shown that communication skills can be taught successfully to medical students, and medical schools now incorporate the subject in the curriculum.

Drawing on literature which suggests that medical education can be dehumanizing, the present thesis argues that an approach to doctor-patient communication based entirely on the acquisition of skills glosses over underlying issues of attitudes to patients. It is proposed that an intervention at the attitudinal level may bring about a more genuine enhancement of teaching skills. An approach based on psychodynamic ideas of the doctor-patient relationship is outlined.

A randomized controlled trial was conducted with 48 second year medical students to evaluate the relative effects on communication skills, attitudes to patients and psychological-mindedness of a course in psychodynamic concepts, a course in counselling skills, or allocation to a wait-list control group. Although there were improvements in the whole sample from pre- to post-test on measures of communication skills and psychological-mindedness, there were no statistically significant differences between the groups in the degree to which they changed on these measures. No conclusions can be drawn as to the efficacy of teaching psychodynamic concepts in terms of enhancing doctor-patient communication; however, it is suggested that the pattern of results implies that further research may be fruitful.
INTRODUCTION

Medical professionals - especially those concerned with medical education - have become increasingly aware in recent years of the importance of communication skills as part of what a doctor must learn and practice (e.g. General Medical Council, 1980, 1988, 1993; World Federation for Medical Education, 1994; World Health Organisation, 1993). The traditional assumptions that such skills were either innate (and therefore not teachable) or would develop naturally in the course of a student's clinical training have been increasingly called into question, particularly by the realisation that patients are dissatisfied with the way that their doctors communicate with them (e.g. Consumers' Association, 1989). In the contemporary climate in which the patient's view is accorded greater importance than in earlier years, the medical profession has had to begin to consider this dissatisfaction and the reasons for it.

This chapter will address a number of inter-related issues. Firstly it will review research which has supported the view that doctors' communication skills need to be improved. Some of the reasons that have been put forward to explain this deficiency will be discussed. Secondly it will ask why the subject of communication skills is important. This question will be answered by looking at the consequences of doctors' shortcomings in such skills: issues of patient satisfaction, diagnostic accuracy, treatment compliance, patients' responses to distressing procedures, and treatment outcome will be addressed. Thirdly, the question will be asked: if doctors' communication skills are inadequate, and if this lack has important consequences, can the situation be changed - i.e. can these skills be taught? Research will be surveyed which shows that they can. Fourthly, given
that they can be taught, to what extent are they being taught? What is the status of communication skills training in medical schools? Finally, to the extent that communication skills are being taught, what is the approach taken to this teaching? Questions will be raised that suggest that the approach may be somewhat narrow, and that skills training might usefully be approached from a broader perspective, which takes account of the question of medical students’ attitudes to patients.

**How good are the communication skills of doctors and medical students?**

Among the common myths about communication skills in medicine (e.g. Cushing, 1996) are the ideas that they are (1) inherent, (2) not learnable, or (3) that repeated practice in dealing with patients is sufficient for the student to acquire the necessary ability to communicate. The first of these is a belief that medical students necessarily have sufficiently good communication skills, which means nothing needs to be done; the second is based in the idea that communication skills are related to enduring personality traits, and that ‘you either have them or you don’t’ - that is, if they are absent, nothing can be done about it. The third of the myths - that the right skills will be developed through practice - is incompatible with the second. However, leaving this contradiction aside, in this section it will be argued separately that communication skills are not inherent in medical students (that is to say, they are not necessarily present) and that practice does not necessarily lead to adequate skills even at an advanced stage in a doctor’s career. Some writers (e.g. Helfer, 1970) have indeed put forward a view that the ethos of medical education is antithetical to the acquisition of appropriate interpersonal skills, and may even cause a deterioration in such skills: this view will be considered. The idea that ‘you have them or you don’t’ - that is to say the question of
whether communication skills, though not necessarily acquired as a result of clinical experience, are teachable, will be discussed in a later section.

Firstly, many studies now show that there are indeed problems of communication between doctors (or medical students) and their patients. For example, Hornblow, Kidson and Ironside (1988) asked a sample of fourth year medical students to rate the levels of anxiety and depression in three patients presented on videotape. The students' ratings differed widely from each other, were often inappropriate, and appeared to be affected in some cases by the student's own emotional state - findings which suggest that the students were not highly empathic. As was observed above, it might be supposed that communication skills should improve during the remainder of medical training or with clinical experience following qualification; however, the evidence suggests that this does not necessarily happen. Maguire and Rutter (1976) analysed videotapes of clinical interviews conducted by 50 senior medical students and rated students on ten items of technique such as clarification, picking up verbal leads and use of leading or complex questions. In general, students' performance was poor. For example, 74% of them failed to pick up more than a fraction of verbal cues, and 32% "gave little or no indication that they wanted their patients to continue talking. Instead they often buried their heads in their notes and rarely, if ever, looked at their patients" (p.557). Maguire and Rutter concluded that medical training had failed to equip the students with the necessary skills. Maguire, Fairbairn and Fletcher (1986), who analysed videotape recordings of discussions between 40 young doctors and their patients, concluded that "very few obtained and took any account of patients' views or expectations [as regards investigations, aetiology or prognosis]. Some young doctors do discover for themselves
how best to give patients information and advice, but most remain extremely incompetent” (p.1576).

Platt and McMath (1979), in a study of more than 300 clinical interviews between (qualified) doctors and their patients, report a high frequency of communication problems, which they classify in five ‘syndromes’. These are: firstly, not realizing that a diagnostic interview contains opportunities to alleviate a patient’s emotional distress; secondly failing to structure the interview in such a way that optimizes their understanding of the patient; thirdly, not generating hypotheses about why the interview is going wrong; fourthly, not asking about the patients’ direct experience as opposed to his reports of what other doctors have said and done; and finally, using a high control style - the doctor following her own agenda and not allowing the patient to talk. Referring to the problem of doctors’ use of a high control style, Waitzkin (1984) discusses socio-linguistic analyses of medical communication: he claims that doctors tend to interrupt patients frequently and to adopt an interrogative mode. Both of these, according to Waitzkin, are communication behaviours which are associated with a position of dominance; they inhibit a mutual exchange of information and de-emphasise the patient’s concerns.

The above studies together give little support for the idea that doctors will naturally acquire good communication skills as a result of their experience during or after training. Some writers on the subject have in fact suggested that medical training has quite the opposite effect: that students become less good at communicating with patients during training. Helfer (1970) analysed videotapes of interviews between medical students and
mothers of ill children in a paediatric setting. He found that first-year students gained more interpersonal and less factual information than their seniors; he concludes that as students move through medical school they become more concerned with organic, disease-oriented information and less with the kind of interpersonal information that, as first-years, they naturally enquire about. Helfer and Ealy (1972) found similar results in a longitudinal study. Scott, Donnelly and Hess (1975) also found that final year students were more directive, and less reassuring, empathic and supportive than second-year students. Bishop, Fleetwood-Walker, Wishart, Swire, Wright and Green (1981) found similar results: although final year students tended to structure their interviews better than first-years, they showed less personal concern for the patients. Thus there are several studies which suggest that, far from communication skills being acquired automatically during training, they get worse - not in terms of ability to structure the interview but in terms of treating the patient as a person.

Not all studies of this kind, however, have found such deteriorations in interpersonal skills during medical training. One study which suggests the reverse is that of Davis and Nicholaou (1992), who compared randomly chosen first and final year medical students in London. Davis and Nicholaou hypothesised that the final year students might be less caring, empathic and supportive, more directive and less concerned with psychosocial information; however, the results did not support these predictions, with final year students superior to first years on some measures, including those of their ability to relate in a caring and empathic manner. Davis and Nicholaou (1992), in their discussion of why their results differ from those of some of the earlier studies, suggest that the inclusion of communication skills in the curriculum may be having an effect, as well as
the general change in attitude towards communication skills. (See below for a discussion of the development in recent years of communication skills training in British medical schools.) The authors add, however, that there remains a need for considerably more training.

What are the implications of poor communication skills in doctors?

Shortcomings in a doctor's communication skills have implications in a number of areas; these include patient satisfaction, diagnostic efficiency, treatment compliance, patients' responses to distressing procedures, and treatment outcome.

While patients are generally satisfied with the treatment they receive from doctors, they are less happy with some aspects of the doctors' communication skills. Ley, writing about communication skills in various branches of medicine (1982, 1988), has reported dissatisfaction rates averaging about 37%. Patients frequently express dissatisfaction about the amount of information they receive from doctors, and about doctors' expression of caring and respect (Evans, Kiellerup, Stanley, Burrows & Sweet, 1987). A Which? report in 1989 found that 89% of patients wanted their G.P. to listen to them more, and 91% wanted the doctor to spend more time explaining about the illness. (Consumers' Association, 1989). Dickson, Hargie and Morrow (1989), in a survey of complaints to the National Health Service Ombudsman, claim that most involved communication problems - at least as one factor in the matter complained of. It is clear from these studies that patient dissatisfaction is widespread.

Patient satisfaction, however, is not all that is affected by communication skills. If a
doctor fails to listen adequately, or to ask the right questions, it follows logically that diagnosis and treatment may rest on inaccurate or incomplete information about the patient's problem. For example, Evans, Stanley, Mestrovic and Rose (1991) found that students trained in communication skills were significantly more 'diagnostically efficient' than untrained controls. In some cases physical or psychological problems may be missed altogether. Sanson-Fisher and Maguire (1980) suggest that it is particularly clear with psychiatric morbidity that accurate detection is affected by interviewing skills: doctors who "use open-ended questions at the beginning of the interview, show empathy, and detect and clarify verbal cues given by the patient", are more likely to recognise psychiatric problems than doctors not using such skills (Goldberg, Steele & Smith, cited in Sanson-Fisher & Maguire, 1980, p. 523-524); and a nurse trained in similar techniques was considerably better at recognising psychiatric morbidity than the other professionals (doctors, nurses and social workers) involved in the case (Tait, Brooke, Maguire and Sellwood, 1980). In addition, however, there are some indications that physical morbidity may be overlooked as a result of poor communication skills (Wiener and Nathanson, 1976).

In addition to questions of accurate diagnosis, communication skills affect compliance with treatment. It is difficult to give estimates of the scale of the problem of non-compliance, since the percentage of patients considered non-compliant will depend on factors such as the criteria used and methods of measurement. (Ley, 1988), reviewing this area, quotes studies of non-compliance rates which give figures varying from 28% to 82%. (All of these studies use 'objective' measures rather than patient reports.) The failure of so many patients to follow medical advice is clearly a serious problem, in terms
of the implications for the patient’s health, the high cost to health services of medication prescribed but not used, failures to attend appointments, and so on. From the present perspective, it is therefore necessary to ask whether enhanced communication skills might improve compliance.

Korsch and her colleagues (Francis, Korsch & Morris, 1969; Freeman, Negrete, Davis & Korsch, 1971; Korsch, Grozzi & Francis, 1968) found correlations between compliance rates in a paediatric clinic and a variety of variables related to the doctor’s communication style. Compliance rates were higher when the doctor was perceived as friendly, when the mother’s wish for information regarding her child’s illness were met, and when the doctor spent time talking about non-medical subjects. Bartlett, Grayson, Barker, Levine, Golden and Libber (1984) found that doctors’ interpersonal skills affected compliance, and further that the effects on compliance were mediated by two factors: patient satisfaction and recall. Sanson-Fisher, Campbell, Redman and Hennrikus (1989) suggest that communication skills which improve compliance fall into three categories: firstly, techniques for correcting patients’ inaccurate health beliefs, secondly, techniques for aiding recall of information (such as presenting treatment instructions clearly and checking that the patient has understood), and thirdly, other strategies such as involving the patient in the negotiation of treatment goals, reducing the complexity of the treatment regimen, and giving information about side effects.

Further benefits of good communication skills may include a reduction of the distress experienced by patients in relation to medical procedures, and an improvement in outcome measures such as post-operative discomfort, length of hospital stay, and
amount of medication required. For example, Johnson, Rice, Fuller and Endress (1978), in a study of patients undergoing gastrointestinal endoscopies, found that when given information either before or during the procedure as to the sensations they might expect to feel, patients required fewer tranquillisers. Schmitt and Wooldridge (1973) provided information, exercise instruction plus quasi-psychotherapy to surgical patients and found that when compared with matched controls, these patients showed better post-operative adjustment on physical measures such as blood pressure, needed fewer analgesics, had shorter duration of anaesthesia and were discharged sooner. However, as Sanson-Fisher and Maguire (1980) point out, it is difficult to separate the effects in such studies of the various elements of communication, such as the provision of information and of support. This difficulty is illustrated by the work of Putt (1970), who found that provision of information to peptic ulcer patients led to a reduction in duration of post-operative discomfort and a decrease in length of hospitalisation compared with control patients. Putt claims further that a group of patients who were given emotional support and encouraged to express their feelings also experienced improvements on the same measures, but not to the same extent as the group given information. The comparison between the two experimental groups is difficult to evaluate, however, since the provision of information may itself be experienced as emotionally supportive. A further weakness of the study is that Putt herself, who had hypothesised that the information group would benefit more than the supportive communication group, was the provider of both types of communication.

Ley (1977) reviews a number of studies which have looked at the effects of communication designed to ease distress and promote recovery. The results, taken
together, are inconclusive, particularly on the question of which elements of preoperative communication are effective; however, nearly all studies reviewed, irrespective of the nature of the pre-operative communications, indicate a reduction in length of hospitalisation, and most studies report that fewer analgesics were required. Mumford, Schlesinger and Glass (1982) review 34 controlled studies of the effects of pre-operative communication on recovery from surgery and heart attacks. Those who received information or emotional support were discharged on average two days earlier than control patients. Psychotherapeutic approaches aimed at relieving anxiety were superior to information only approaches; but Mumford et al. conclude that a combination of the two is superior to either in isolation. Taken as a whole, this research clearly suggests that communication with patients can have important post-operative effects.

Finally, in relation to treatment outcome, it should be noted that the studies just referred to all relate to patients undergoing hospital operations. The relevance of communication skills to outcome, however, is presumably much broader. As a logical consequence of all the issues discussed in this section - particularly inaccuracy of detection and diagnosis, and failures in treatment compliance - it is clear that shortcomings in doctors' communication skills must in addition have a deleterious effect on treatment outcome. Furthermore, this effect may not only be an indirect one, mediated by failures of diagnosis or compliance: in cases where the patient's problem is primarily psychological, good communication skills (e.g. on the part of a G.P.) may directly contribute to amelioration of symptoms. Cape (1996) for example studied interactions between G.P.s and patients presenting with emotional problems. He found significant relationships between rated empathy and warmth, and listening interactions, with outcomes of the
consultation as measured by patients' perceptions of the therapeutic relationship with the G.P. and of the helpfulness of the consultation. As Cape points out, it is not obvious whether these 'immediate impact measures' are related to longer term clinical outcomes, though this is possible. Further research relating G.P.s' interpersonal skills to long term change in patients' emotional problems would be interesting. In addition to the possibility that good communication skills ameliorate psychological problems, it has also been suggested that poor communication skills can cause such problems. According to Laurance (1997), a recent report issued by the Royal College of General Practitioners says that one in five patients in cancer units develop full-blown psychiatric disorders, and the main cause is the way that bad news is broken.

In summary, good communication skills are not merely a desirable addition to a doctor's range of skills but are of central importance in medical practice.

**Can communication skills be taught?**

Given that doctors' communication skills are often inadequate and that this has far-reaching consequences, the question arises whether such skills can be taught. Reference was made earlier to the myths surrounding communication skills (e.g. Cushing, 1996) - for example that the student will acquire the necessary skills automatically as a result of continuing experience with patients, or the assumption that 'you either have them or you don't', that is, they are not learnable. Consideration was given above to studies which suggest that communication skills are not necessarily present in medical students, and do not come automatically with practice; it is now necessary to address the assumption that they cannot be learned.
A large number of studies have evaluated courses in the teaching of communication skills. For example, Bacorn, Mullins and Tarbox (1987) describe a course taught to medical students at the University of Texas, comprising eleven two-hour sessions. The course includes lecture and videotape presentations but the largest part is made up the students undertaking patient interviews which are observed by their peers and supervisors. Bacorn et al. evaluate this course by means of student feedback on its helpfulness, and report that each year at least 88% of students consider the course valuable in teaching interviewing and communication skills. This approach to evaluation, however, does not test the students’ skills in any way, only assessing participants’ opinions of the course.

Studies which have evaluated the effects of communication skills training by testing changes in skills include that of Winefield (1982), who ran an 8-hour course focusing on attending and empathic responding. Winefield reports a significant increase in empathic responding as assessed by written responses to short trigger statements. However, the validity of this kind of measure is questionable, since gains shown by them may not correlate with changes in interview performance (Evans, Stanley & Burrows, 1993).

Alternative approaches to the evaluation of courses in communication skills include that of Tamburrino, Lynch and Nagel (1990). These authors describe a 9-hour course in communication skills which included critiquing a videotaped interview, role-plays between students, and feedback on videotapes of interviews between patients and participating students. Evaluation of this course was carried out by means of a Helping Relationship Inventory or H.R.I. (Jones, 1973), which presents vignettes of patient
encounters and asks respondents to rank order their preferences for a series of possible responses to the patient. At post-test, students were more likely to prefer ‘understanding’ responses and less likely to prefer pacifying or reassuring responses. (Preferences for other types of response did not change.) Tamburrino et al. (1990) conclude that the course improved participants’ communication skills. Again, however, it is not clear that changes in scores on a written test like the H.R.I. relate to improvements in actual interview performance, though one previous study (Harris, Eckert, Petzel & Westermeyer, 1984) reported a relationship between H.R.I. preferences and real interview behaviours.

Other researchers have studied consultation behaviours as outcome measures for evaluating communication skills training courses. For example Usherwood (1993) describes a course which involved students listening to a tape of an interview they had conducted with a patient, and discussing it with a tutor. A number of changes were observed in a comparison between pre-course and end-of-course interviews with patients, including the students asking more open questions, more questions referring to feelings and fewer referring to physical symptoms.

Evans, Stanley and Burrows (1993) used two outcome measures to evaluate an 11-hour lecture and workshop based course in empathic skills: first, a pencil-and-paper test, the Interpersonal Reactivity Index or I.R.I. (Davis, 1983), and secondly a History-taking Rating Scale with which observers rated students’ empathic behaviours in videotaped patient interviews. The I.R.I. showed no changes over time, but as measured by the History-taking Rating Scale, the students in the training course group showed
improvements in empathic behaviours over time, while the control group showed decreased empathy. These results suggest (a) that the observational measure may be more sensitive than the I.R.I. in detecting changes in empathy, or that the measures test two different aspects of empathy, only one of which changes as a result of the teaching course, (b) that empathic skills can be acquired and (c) that students untrained in such skills may become less empathic - the latter result being consistent with the findings of Helfer and Ealy (1972), Scott et al. (1975) and Bishop et al. (1981).

These studies support the view that communication skills can be taught, rather than being something that 'you either have or you don’t’. However, there are some differences between the studies as regards teaching methods. Maguire, Roe, Goldberg, Jones, Hyde and O’Dowd (1978) compared four different approaches to the teaching of communication skills: undergraduate medical students were randomized into groups which received either clinical training alone or feedback of three different kinds. The training only produced significant improvements in the groups which received feedback by audiotape or videotape replay.

Interestingly, the Maguire study also suggests that communication skills - at least when taught using this feedback method - are retained. Maguire followed up a subsample of his participants four to six years later, and found that the group given feedback as undergraduates maintained their superiority in key skills. Craig (1992), however, found that a group of students who had shown significant improvements in communication skills after a course in their first year, showed a marked deterioration when re-tested two and three years later. In this study, both the experimental and control groups showed
significant declines in particular behaviours classified by Craig as empathic (e.g. making statements reflecting the patient’s feelings, tuning into probable feelings that are not expressed, refraining from asking fact-finding questions as a retreat from dealing with feelings). Craig suggests that this finding supports the idea that as students become more preoccupied with medical problem solving, they are less likely to ask for and use the patient’s frame of reference. There is no obvious reason for the discrepancy between the deterioration shown by Craig’s sample and the retention of skills in Maguire’s study; further research on retention of skills over time would be useful.

The status of communication skills training in medical education

There has been considerable growth in the teaching of communication skills in medical schools in recent years. The General Medical Council (1980) stated that “on graduation a student should be competent to communicate effectively and sensitively with patients and their relatives”, and urged British medical schools to provide such training. Wakeford (1983) reported that a third of the schools offered no such training and in the remainder it occupied only about one to two hours of curriculum time. In the mid-1980s the General Medical Council, assessing the response to its earlier recommendation, found that many medical schools had not responded adequately, with five still offering no communication skills training at all (General Medical Council, 1988). Whitehouse (1991), however, in his survey of communication skills teaching in UK medical schools, wrote of “a considerable development” over the previous ten years, though he noted wide variation in time allotted to the subject and the objectives of courses.

In a survey of 24 British medical schools (the remaining three schools did not respond),
Frederikson and Bull (1992) found that all respondents now provided some form of communication skills training. Only seven of the schools, however, mention communication skills in their descriptions of course content in their prospectuses. The authors suggest that the prospectus can be taken as a reflection of the organizational climate, and that the failure of most schools to mention the subject of communication skills indicates that it is given “insufficient weight and prominence” (p. 520). Moreover, Frederikson and Bull found that only 25% of the schools have any formal assessment of communication skills; they comment that unassessed curriculum content is likely to be discounted by students in favour of subjects in which success is critical to advancement.

The academic context in which communication skills are taught is also significant: Frederikson and Bull say that the subject is usually taught within a behavioural science module, but behavioural sciences themselves are considered marginal subjects. The authors conclude that “no-one denies the importance of communication skills and everyone wants to be seen to doing something about them. [But] the display of positive attitudes is not backed up by appropriate behaviour within all the institutions charged with providing basic medical education” (p.519); “... communication skills training is being treated as a minor subject of low significance and denied its proper place in an already overcrowded curriculum. Medical education pays lip service to communication and interpersonal relations while remaining disease-oriented in its approach” (p.520).

The view that progress to date has been limited was also expressed in The Guardian in April 1997 by Dr David Armstrong of Guy’s and St. Thomas’s Hospitals, London: “Good communication is very rare in the N.H.S. There’s a barrier to change that is very slow in breaking down.” (Sadgrove, 1997).
Bird, Hall, Maguire and Heavy (1993) found that communication skills training usually consists of short courses run in departments of general practice, psychiatry or behavioural science, possibly giving students the impression that these skills are irrelevant in other fields of medicine. Cushing (1996) recommends that all clinical specialities should be involved; she wholeheartedly embraces the need for thorough teaching of communication skills and gives numerous recommendations for its development. It can be concluded that there has been some development in medical educators’ attitudes towards communication skills over the last ten to twenty years, and to some extent this is reflected in the provision of communication skills teaching. Shortcomings do remain, however, and further progress is needed.

The wider context: attitudes to patients

The present thesis seeks to place the discussion of communication skills in a broader context. Much of the literature on communication skills treats them in isolation, and does not discuss for example how they relate to students’ attitudes to patients. It is at least arguable that underlying attitudes will affect one’s ability to communicate with patients; if so, then teaching communication skills as an ‘add-on’ subject without addressing the question of attitudes may be an approach which meets with limited success. It may even be that different approaches to the teaching of communication skills are needed with different students, according to their attitudes and personal qualities.

Before this argument is pursued it will be useful to pause to survey the background in terms of aspects of medical education which have been held to affect students’ attitudes to patients.
Much of the literature on the subject of medical students’ attitudes presents an even less encouraging picture of their abilities than the studies of their communication skills. Fields and Toffler (1993), in a study of the hopes and concerns of a class of medical students at the beginning of their training, found that the most common hopes were to provide personal care and to develop relationships with patients. Some observers say these ideals are crushed by the training process, which “neglects the personal aspects of patient care, [resulting in] doctors who lack concern, interpersonal warmth and humanitarian care” (Coombs, 1991, p. 539). Several aspects of medical training have been blamed for contributing to this effect. One of these is that medicine is taught from a largely technical, biological standpoint, promoting a view of the patients as “plumbing and chemistry, not as persons” (Shockley, 1986, p. 808). As Werner and Korsch (1986) put it: “patients will be transmuted into abstractions”.

Kass (1985) suggests that the point at which medical students begin to learn this detached view of human beings is when they start dissecting cadavers; this notion was given some support by Charlton, Dovey, Jones and Blunt (1994), who attempted to measure attitude changes from the day before students began dissection to three months later. They claim some evidence that caring reactions diminish in that time, though some of their questions may have allowed unclarity in the respondent’s mind about what kind of emotional reactions were being probed. In addition, as they acknowledge, any changes over those three months may not be attributable to the experience of dissection, as there were no non-dissection controls. However, whatever the role of specific experiences like dissection of a cadaver, many writers (e.g. Davis-Floyd, 1987) have argued that students during the course of their training, as they acquire more medical
Another aspect of medical training which has been blamed for inculcating a dehumanised
to succeed may cause the students to lose touch
attitude in students is that the ethos in medical schools is competitive and
with the more humanitarian ideals which may have led them to choose medicine as a
career. A related point is that the students are given little opportunity at any stage to
discuss their feelings about their work. Coombs (1978) conducted personal interviews
with a class of medical students and wrote of “the ubiquity and depth of their pent-up
frustrations, anxieties and resentments” (p. 539). Coombs (1991) comments that “in an
effort to appear ‘cool’, ‘intelligent’ and ‘professional’, they had become emotionally
isolated”. Graham (1991) gives a case study of an obstetrician-in-training in an American
medical school. The same doctor was observed dealing with a traumatic birth when an
intern and another when a chief resident three years later. It is clear from the descriptions
given that the doctor was far more sensitive towards the mother in the earlier case.
Graham relates this to the culture of the medical school, in which expression of any
emotion is discouraged as ‘unprofessional’; she describes how another intern who held
a mother’s hand and wept with her when her term foetus had died was severely
reprimanded and told that doctors must remain ‘in control’. This provides a striking

Another view of a dehumanising process in medical education is that it begins well
before the students are confronted with their first human cadaver - that it begins with
student selection. Many writers have drawn attention to the fact that medical schools
have traditionally selected students exclusively according to academic criteria (e.g. McManus & Richards, 1984). Coombs and Paulson (1990) claim this favours applicants who are emotionally inexpressive, bookish and narrowly scientific in outlook. Glick (1994) states that because these attributes may be undesirable in doctors, the selection process should not be aimed at "discovering which students have the requisite academic and intellectual attributes, since that number seems to exceed greatly the number of available places, but to select those who, in addition to the mind possess also the heart" (p. 267). Glick describes the interview process at Ben-Gurion University, developed with the aim of achieving exactly that: interviewers assign major weight to qualities of empathy, flexibility and responsibility and use academic ability as a threshold only. Collins, White, Petrie and Willoughby (1995), who also believe that personal attributes, rather than merely academic grades, are important in the selection of medical students, describe a selection process which involves an interview and group exercise. They report that they have found no relationship between academic achievement and scores in the interview and group exercise.

However, Zeldow and Daugherty (1987) deny that medical training has a dehumanising effect on students. These authors administered the Femininity Scale of the Personal Attributes Questionnaire to a class of Chicago medical students four times in three years (the scale measures traits of gentleness, warmth, understanding, helpfulness, etc.); they also took measures of empathy and attitudes towards doctor-patient relations. They claim 'femininity' was very stable over the period and predictive of empathy and a person-oriented approach to patient care; they conclude that medical school has no effect (rather than an adverse effect) on these human qualities. It is possible that the
results may have been influenced by the presence of communication skills training in the curriculum in the same way as Davis and Nicholaou (1992) speculate that their results may have been affected - i.e. the positive effects of such training may have outweighed any deleterious effects of medical school on their empathy and femininity. However, a major flaw in the study (which the authors acknowledge) is that it is based entirely on self-report measures.

The picture built up by this brief review is rather bleak. Medical schools appear to select students who are academically gifted but may be emotionally unexpressive and narrowly scientific in outlook, and medical training reinforces these tendencies by approaching medicine from a biological rather than humanistic point of view, and by promoting a hard-headed professionalism such that expression of feelings is discouraged; the result being doctors who are emotionally isolated and unable to enter into empathic relationships with their patients.

The nature and aims of communication skills training

It was seen earlier that communication skills need to be improved, that they can be taught, and that they are, at least to some extent, being taught. However, the picture given above of the ethos of medical training raises important background issues. If it is accepted that medical education is a dehumanising, or at least not a very humanising, process (e.g. Werner & Korsch, 1986; Coombs, 1991), the question arises, when a student learns communication skills, is the instructor merely imparting techniques which a student can employ in medical interactions to give the impression that he is listening, cares about the patient and so on, or are deeper changes taking place? That is to say, do
courses in communication skills bring about a reversal of the dehumanising process? Or do they merely provide a plausible veneer of humanity covering an underlying emotional coldness brought about by the experiences the student has undergone and the professional culture that he has encountered?

The latter may be closer to the truth. It is possible to argue that any form of communication skills training implicitly conveys certain attitudes - for example that it is important to treat the patient with respect - and therefore that such training is inherently humanising. However, it is in the nature of communication skills training that the skills are taught as an ‘add-on’ to an existing repertoire of medical knowledge and clinical techniques, and for this reason instruction in communication skills may not affect the students’ underlying attitudes to patients. Indeed, there may even be a danger that the acquisition of such skills in some respects exacerbates the problems in the doctor-patient relationship. For example, if a doctor is poor at relating to his or her patients, giving the doctor a set of techniques for talking to the patient may persuade the doctor, perhaps wrongly, that he or she is now a good communicator and need not attend further to such matters; moreover it may trivialise the issue in the doctor’s mind, reducing central concepts such as empathy to a range of stock phrases to be used in responding to distressed patients. If this were the result of training doctors in communication skills, it would be arguable that such training only serves to distance the doctor still further from the patient; in the words of Plum (1981), prescribing specific communicative behaviours for specific situations may tend to “displace the interpersonal with the technological” (p.3).
It may be, therefore, that in order that a real improvement in the doctor-patient relationship is achieved, medical students need more than a training in communication skills - a training which may leave underlying attitudes untouched and the student no more able (perhaps even less able) to create a good relationship with the patient than before. It would arguably be more effective to address the question of underlying attitudes. As Flaherty (1985) puts it, “attitudes predispose to certain sets of behaviour, particularly in the area of interpersonal skills ... If we are to influence [behaviour], it is essential to understand the factors which form the attitudes that antecede the behaviours. In addition, the physician’s attitude alone has an important effect on the patient’s experience regardless of behaviours.” (p.148). Similarly, Plum (1981) advocates an approach that attempts “to expand the cognitive and ethical frameworks, and emotional and perceptual sensitivities, that underlie personal communication, rather than trying to alter communicative behaviour directly. It is possible”, he continues, “...to help people improve the sensitivity and accuracy with which they perceive other people’s messages, to provide them with the conceptual tools to help them understand other people’s actions, and to aid them in enlarging their imaginative capacities so they can see the world from other people’s perspectives.” (p. 15).

This line of discussion raises important questions about how communication skills are taught. It is clear from the research cited earlier that it is possible to teach communication skills, though the evidence is equivocal on whether such skills are retained. However, in this section doubts are raised as to whether the teaching of skills in isolation is desirable. A broader approach to the question of teaching communication skills, advocated by such writers as Plum (1981), would be to consider interventions
which may influence the underlying attitudes of the students (or doctors).

**An alternative approach to the teaching of communication skills**

Approaches to the ‘humanising’ of medical students which are based on attempts to change their attitudes to patients are few and far between. A key purpose of the present research, however, is to propose that it may be possible to develop such an approach by drawing on the psychoanalytical tradition. This suggestion is not without precedent. Michael Balint (e.g. 1957), believing that G.P.s underestimated the psychological aspects of patient consultations, developed a research programme based on what came to be known as ‘Balint Groups’. In these groups, one G.P. would present the case of a patient he or she had seen, and the case would then be discussed, not purely from a medical point of view, but in terms of the doctor-patient relationship. Balint’s view was that traditional medicine conceptualised the body as a complex machine made up of many parts, and that when a patient presents with a symptom or symptoms, the doctor’s usual response was to assume that something had gone wrong with one of the parts. Balint proposed that “more often than scientific medicine cares to admit, it is not with a part, but with the whole man that something has gone wrong” (Balint, 1965, p.1179); he added, “The only method that can tell us anything about the man is the observation of his individual ways of relating to others. The two areas of his relating to others which readily lend themselves to observation are the ways he behaves towards others and the ways he talks to others - above all to his doctor during the medical examination.” (p.1180). In other words Balint advocated a holistic approach to general practice, an approach which included taking an interest in the patient’s psychological functioning and how emotional difficulties may relate to physical symptoms. His method - the
observation of the way the patient related to the doctor - was based in the psychoanalytical tradition and formed the basis of the Balint groups referred to above. Balint work still continues (e.g. E. Balint, Courtenay, Elder, Hall & Julian, 1993); and in the context of the present discussion of communication skills in medical students it is of particular interest that Balint groups are used in medical training at Laval University. Among the objectives of this work listed by Frenette and Blondeau (1989) are teaching participants to have a more global understanding of the patient, to avoid a break between somatic and psychic medicine, and to be more attentive to the patient.

Another approach of considerable interest, again drawing on the psychoanalytical tradition, is that of Shoenberg (1992). Shoenberg describes a 'student psychotherapy scheme' operating at University College Hospital, London, in which a small number of students in their first clinical years each take on a psychiatric outpatient for weekly analytical psychotherapy for about a year. The students also attend a supervision group in which they discuss their patients.

Shoenberg explains the purpose of the scheme in terms of "the real need for the student to have the opportunity to discuss freely his feelings about the patients...and to recognize that these feelings about caring for, being confused and despairing about patients are real and worth talking about" (p.10). Shoenberg states that the scheme is intended to bring about an insight into the doctor-patient relationship, and claims that participants in the scheme "have mostly become more caring and more aware of how to value their own and their patient's sensitivities and of the value of continuity of care and the ways in which they can be disrupted. This personal development sometimes contrasts with that
of other final year students who may have lost their earlier enthusiasm and interest in the doctor/patient relationship in their search for a professional identity” (p.14).

In respect of the question posed above about whether communication skills training brings about real or only superficial changes, both Frenette and Blondeau (1989) and Shoenberg (1992) are clearly aiming at real, attitudinal changes in the students who participate in their schemes, rather than merely providing them with superficial ‘add-on’ skills. It might therefore be surmised that training the student to think carefully about the doctor-patient relationship may enhance the student’s capacity to relate to the patients; and further that this may be reflected in observable ways in their interactions with patients.

The present research

The present research aims to investigate the idea (derived from Frenette and Blondeau, 1989, and Shoenberg, 1992, but applied here in a quite different way) that encouraging medical students to focus on the doctor-patient relationship will have effects on the way they interact with patients. This will be assessed by means of a randomised controlled trial evaluating the effects of a short workshop-style course in basic psychodynamic concepts on medical students’ communication skills, attitudes to patients, and their awareness of psychological factors associated with physical symptoms.

Given the difficulties discussed above in measuring aspects of communication skills using written tests (Evans, Stanley & Burrows, 1993), participants’ skills will be measured (both before and after the course) using an observational test: interactions between
participants and actors/actresses playing the part of patients will be audiotaped and rated for communication skills by two raters. The actors and actresses will play patients who present with physical symptoms which have a primarily psychological aetiology.

It is assumed that any observed improvement in skills will be mediated by a change in attitudes to patients brought about by encouraging the medical students to think about the doctor-patient relationship in a psychodynamic way. Attitudes will be measured by assessing students’ responses to a series of hypothetical patients who present particular difficulties in communication; these difficulties will be understandable in psychodynamic terms, and it is expected that after attending the course in psychodynamic concepts, participants will therefore be more understanding towards these patients, and express more enthusiasm for treating them.

One of the aims of Balint training (e.g Balint, 1965; Frenette & Blondeau, 1989) is that participants become more aware of the psychological aspects of their patient’s presentation. In the present research, the ‘patients’ that the participants interview before and after the course will present with problems that are ostensibly physical but have a primarily psychological aetiology, and it is expected that after the course, participants will show a greater awareness of psychological factors when asked to describe the patient’s problems.

The effects of the psychodynamic course will be compared with those of a more ‘traditional’ communication skills course (that is, one which is based in the client-centred tradition and teaches practical skills of listening, questioning and empathising), and also...
with the effects of no intervention - i.e. assignment to a wait-list control group. Because the counselling skills course is practical and behavioural in its approach, it is expected that the students in this course will show larger effects on the communication skills measure than the psychodynamic course.

On the other hand, behavioural changes may not in the case of this group be related to attitudinal changes: thus it is not expected that this group will show any changes on the attitudes measure. Nor will the counselling skills group be taught explicitly about psychological factors in physical illness; however it may be that as a by-product of changes in their communicative behaviour, they discover more psychological information from the ‘patients’ after their course than before. It is therefore predicted that the counselling skills group will show an increase in psychological-mindedness, but not as great an increase as the psychodynamic group.

The hypotheses are summarised below:

1. The Counselling Skills course will bring about an improvement in the participants’ observable communication skills compared with the wait-list control group. The Psychodynamic course will also bring about an improvement in observable communication skills, but the magnitude of the effect will not be as great as in the Counselling Skills course.

2. Participants in the Psychodynamic group will show an increase in their willingness to treat difficult patients and in their estimates of how much they would enjoy treating
them. Participants in the Counselling Skills group will show no change on these measures.

3. The Psychodynamic group will become more aware of psychological factors in the patient’s presentation. The Counselling Skills group will become more aware of psychological factors, but will improve less in this respect than the Psychodynamic group.
METHOD

Overview

Forty-eight medical students were randomly allocated to one of three groups: the first attended a Counselling Skills Course, the second a course in Basic Psychodynamic Concepts, and the third formed a Wait-list Control Group. Measures of the participants' communication skills, their psychological-mindedness, and their attitudes to patients were obtained at two time points: before and after the two courses. The same measures were used at each time point: communication skills were measured by asking each participant to play the part of a general practitioner in a five minute live interaction with an actor or actress playing a patient. The interaction was audiotaped and subsequently rated on several dimensions of communication skills. Psychological-mindedness and attitudes to patients were measured using questionnaires devised for this study.

Participants

The participants were second year pre-clinical medical students at University College Hospital, London. An announcement was made to a group of approximately 195 students attending a lecture, requesting volunteers for the project. Of these, 67 (34%) indicated their interest by giving their names. These 67 students were given an information sheet giving further information about the study, together with a letter giving details of the times they would have to attend for pre-test, intervention and post-test stages. Of these 67, 51 students (76%) attended the pre-test phase of the project, and of these 48 (96%) also attended the post-test.
Ethical considerations

Ethical approval for the project was given by the Joint UCL/UCLH Committees on the Ethics of Human Research (see Appendix A for letter of approval).

Participants read an information sheet before they agreed to take part (see Appendix B). This sheet gave an outline description of the research; it also stated that the project was not part of the students' formal medical training, that participation was voluntary, and that they could withdraw at any time.

Prior to taking part in the first stage of the project, each student signed a consent form (Appendix C); any questions they had at this point were answered before they signed the form. During the intervention stage of the research, a further brief explanation of its aims was given to the participants. They were told that results of the research would be available to them in due course, and that they were welcome to contact the researcher at any time.

DESIGN

Randomisation

Participants were allocated randomly into three groups: a ‘Counselling Skills’ group, a ‘Psychodynamic’ group and a Wait-List Control group. This allocation determined whether they received Counselling Skills Training, a course in Basic Psychodynamic Concepts, or a mixed course taking place after all testing was completed. A small
number of participants who were allocated to either the Counselling Skills group or the Psychodynamic group could not attend the teaching courses; they were asked to attend the pre- and post-test and treated as part of the control group. There were in all 14 participants in each experimental group and 20 in the control group. The group each student was allocated to did not determine which date or time their pre- and post-testing was to take place: at each session of testing a mixture of members of all three groups was tested.

Pre-test

All participants took part in a five-minute Objective Structured Clinical Examination (O.S.C.E.); that is, a role play in which they were asked to play the part of a general practitioner, with an actor or actress playing a patient. (Four actresses and two actors were used altogether). Each participant was given brief written instructions (see Appendix D) prior to the interaction which included the name of the patient they were about to see. They were then shown into the testing room, an audio-tape recorder was switched on and a timer set for five minutes. The actor/actress playing the patient was then sent into the room. After five minutes the timer indicated the end of the role-play, and the 'patient’ left the room. The participant then filled in the Patient’s Problem Questionnaire (details of all measures are given below). The participant brought this completed questionnaire out of the testing room and was given the Attitudes to Patients Questionnaire to fill in.

Prior to the role-play the actors and actresses were given details of the role they were playing, including information about the presenting complaint, as well as background
information on family, relationships, and employment (see Appendix E). They were given instructions on how to disclose information, this being determined by what the ‘doctor’ asked. After each interaction, the actor/actress filled in a questionnaire about the participant’s communication skills.

**Intervention**

During a two week period following the pre-test phase, participants in two of the three groups attended teaching courses. The Counselling Skills group attended a two-afternoon course in Counselling Skills, the Psychodynamic group a two-afternoon course in Basic Psychodynamic Concepts. The two courses were taught by the same tutor (the researcher) and were designed so that they contained a similar proportion of tutor input and practical work - the practical work including discussion and role-plays carried out in small groups.

*Counselling Skills Course:* (14 participants). This course was an introduction to basic counselling skills and included the following: layout of room, greeting the patient, making eye contact, questioning skills (open-ended and closed questions; leading questions), listening skills, empathic responses and summarising. Participants were given extended opportunities for facilitated discussion of these topics as a large group and practised these skills in small group role plays with each participant given the chance to play a patient, doctor, or observer. Discussion of the role plays took place both within the small groups and in the large group. Further details of the course are contained in Appendix F.
*Basic Psychodynamic Concepts Course:* (14 participants). This course was a two afternoon course introducing participants to the following topics: A psychodynamic model of the mind and psychological conflict; the therapeutic relationship; unconscious communication; transference and countertransference. Extended opportunities were given for facilitated whole-group discussion of segments of doctor-patient interactions which were illustrative of the themes of the course. Participants were also given transcripts of a number of such segments to discuss in small groups, and were asked to role-play them, experimenting with ways of responding to the feelings underlying the manifest content of the patient’s communication. Further details of the course are contained in Appendix G.

*Wait-List Control Group:* (20 participants). This group received no training between pre- and post-test. After the post-test phase they received a two afternoon course incorporating elements from both of the above courses.

**Post-test**

During the three-week period after the end of the above courses, all participants who had attended the pre-test were asked to return to take part in a second O.S.C.E. similar to the first. Although each participant saw a different actor/actress from the one they had seen at pre-test, playing a patient with a different presenting symptom, in all other respects the procedure and measures used were identical to those of the pre-test.

**Measures**

*Patient’s Problem Questionnaire:* (Appendix H) A questionnaire developed for the
present study filled in by each participant at the end of the five-minute interaction, eliciting information on the participant’s perception of the patient’s problems and their causes. This was then rated by the researcher for psychological-mindedness on a four point scale from 1 (“Shows no awareness of psychological factors behind the symptoms”) to 4 (“Shows very good awareness of psychological factors behind the symptoms”).

**Attitudes to Patients Questionnaire: (Appendix I.)** A second questionnaire filled in after the participant had completed the Patient’s Problem Questionnaire. This questionnaire was devised to measure participant’s attitudes to patients who challenge the doctor in some respect. This comprised four brief vignettes describing hypothetical patients. The vignettes were written such that one incorporated an indication of positive transference, one negative transference, one countertransference, and one was neutral in that it was not indicative of any transference or countertransference issues. In each case the participant answered two questions about the vignette, on how happy they would be to treat these patients and how much they would enjoy working with them. The two questions about each patient on the questionnaire were answered using a five-point response format, ranging from 1 (“Not at all”) to 5 (“Very much”).

**Actor/actress questionnaire:** (Appendix J.) The actor/actress filled in a questionnaire comprising five questions about the communication skills of the participant. The questions were answered using a five point response format. The questions elicited the actor/actress’s perceptions of how much the doctor understood his/her problems, how receptive the doctor was, how much the ‘patient’ felt he/she had to hold things back,
how much confidence the patient had in the doctor, and an overall judgement of how good the doctor’s communication skills were.

**Client Satisfaction Questionnaire:** (Appendix K.) Based on the Client Satisfaction Questionnaire of Larsen, Attkisson, Hargreaves and Nguyen, 1979. At the end of each of the two courses (attended by the Counselling Group and the Psychodynamic Group respectively) each participant was asked to fill in a questionnaire evaluating the course. The first five questions on the questionnaire were answered on a four-point response scale; the remaining three requested qualitative feedback on the courses.

**Communication Skills Rating:** (Appendix L.) Six dimensions of the participants’ communication skills were rated by trained raters from audiotape recordings of the role plays. The dimensions were (1) attending (to what extent the participant attended to and responded to what the patient said); (2) empathy (to what extent the participant tuned into what the patient said and responded sensitively); (3) intuitive empathy (to what extent the participant was able to understand the emotions behind what the patient said); (4) doctor-centredness (to what extent the participant used during any part of the interview a style based on asking closed questions, making suggestions, following the doctor’s agenda); (5) patient-centredness (to what extent the participant used during any part of the interview a style based on open questions, exploring the patient’s feelings, following the patient’s agenda); (6) overall communication skills (how good the participant’s communication skills were). Dimensions (1), (2) and (6) were based on Pistrang and Barker (1996); items (4) and (5) were based on Byrne and Long (1976); item (3) was devised with a view to gauging the effects of the teaching done with the
Psychodynamic group on unconscious communication.

**Rating procedure**

The raters were one male assistant psychologist and one female first year clinical psychologist in training. They were trained in the use of the Communication Skills Rating measure in the course of two meetings between them and the researcher, during which explanations about the dimensions to be rated were given and discussed, and a series of sample interactions were listened to and rated. The two raters were then asked to rate all 96 interactions (48 pre-test, 48 post-test). They were blind to which interactions were from pre-test and which from post-test, and to which group the participants were in. (The participants were identified only by a code number on the tapes.)
RESULTS

Overview

The results are presented below in 5 sections. The first section includes data on inter-rater reliability for Objective Structured Clinical Examination (O.S.C.E.) ratings followed by details of pre-test and post-test data for each O.S.C.E. dimension separately. The second section presents data from the actor/actress ratings of participants’ communication skills. The third section presents data on attitudes to patients. The fourth presents figures for psychological mindedness, and the fifth data on participants’ satisfaction with the course they attended.

O.S.C.E. Ratings

This section will present data on inter-rater reliability between the two raters, and then figures obtained at pre- and post-test on each dimension on the rating questionnaire.

Inter-rater reliability

Table 1 presents data on inter-rater reliability between the two raters who rated the recordings of the Objective Structured Clinical Examinations (O.S.C.E.s). The Table gives figures relating to all 96 O.S.C.E.s, i.e. 48 pre-test and 48 post-test ratings combined. Reliability figures are given separately for each dimension rated.

The inter-rater correlations were rather low (Table 1: first column). On examining the pattern of ratings, it seemed that one of the reasons for this was that there is a relatively large number of interactions on which both raters rated the participant at the mid-point of the scale, which depressed the correlation figures in a misleading way. Therefore an
alternative set of inter-rater reliability figures was calculated by ascertaining the percentage of interactions on which the two raters were no more than one point apart. This gives figures of 85% or more on all dimensions except doctor-centredness and overall communication skills, which is more acceptable.

The doctor-centredness rating shows relatively low inter-rater reliability by either method of calculation. The results for that dimension will therefore be treated very cautiously. The reason for the particularly low correlation coefficient on attending (0.29) is that there was a ceiling effect on that dimension - nearly all participants were given the highest ratings of 4 or 5; percentage agreement within one point is however acceptably high (86%).

Table 1. Inter-rater reliability on O.S.C.E. ratings

<table>
<thead>
<tr>
<th>O.S.C.E. rating</th>
<th>Correlation</th>
<th>Percentage of interactions on which raters no more than one point apart</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: Attending</td>
<td>0.29</td>
<td>86%</td>
</tr>
<tr>
<td>Q2: Empathy</td>
<td>0.43</td>
<td>85%</td>
</tr>
<tr>
<td>Q3: Intuitive empathy</td>
<td>0.56</td>
<td>85%</td>
</tr>
<tr>
<td>Q4: Doctor-centredness</td>
<td>0.31</td>
<td>78%</td>
</tr>
<tr>
<td>Q5: Patient-centredness</td>
<td>0.62</td>
<td>93%</td>
</tr>
<tr>
<td>Q6: Overall communication skills</td>
<td>0.57</td>
<td>66%</td>
</tr>
</tbody>
</table>

On overall communication skills, the correlation coefficient is 0.57 and the percentage agreement within one point is only 66%. The latter figure would be expected to be lower
than the equivalent figure for other dimensions, since on overall communication skills the raters used a 9-point scale, giving more room for disagreement in excess of one point than on the 5-point scale used for the other dimensions. The percentage of O.S.C.E.s on which the raters were no more than two points apart on overall communication skills was 85%.

Altogether, inter-rater reliability is only moderate, and requires that the O.S.C.E. ratings must be treated with some caution. For the purposes of the remaining results in this section, the ratings of the two raters were averaged.

Individual dimensions on the O.S.C.E. Rating

Results on the six dimensions rated will be reported in turn. In every case, analysis of variance calculations showed no group effect or group x time interaction. (Hypothesis 1 is not upheld). However, on some of the six dimensions there was a significant effect of time. In this section we will therefore report t-test figures comparing pre- and post-test means for the whole sample.

Attending

Table 2 gives mean scores on the Attending dimension for the three groups of participants at pre- and post-test. A t-test shows that Attending scores for the whole sample decreased significantly from pre- to post-test. (t(47)=3.10, p<0.01.)

Empathy

Table 3 gives mean scores on the Empathy dimension for the three groups of participants
at pre- and post-test. Empathy scores for the whole sample increased non-significantly from pre- to post-test. (t(47)=1.5, n.s.)

Intuitive Empathy

Table 4 gives mean scores on the Intuitive Empathy dimension for the three groups of participants at pre- and post-test. Intuitive Empathy scores for the whole sample increased non-significantly from pre- to post-test. (t(47)=1.72, n.s.)

Doctor-centredness

Table 5 gives mean scores on the Doctor-centredness dimension for the three groups of participants at pre- and post-test. A t-test shows that Doctor-centredness scores for the whole sample decreased significantly from pre- to post-test (t(47)=3.51, p<0.01.)

Table 2. O.S.C.E. Scores for attending.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Counselling Group</td>
<td>4.28</td>
<td>0.38</td>
<td>4.04</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>4.39</td>
<td>0.40</td>
<td>4.11</td>
</tr>
<tr>
<td>Control Group</td>
<td>4.30</td>
<td>0.44</td>
<td>4.10</td>
</tr>
<tr>
<td>Total sample</td>
<td>4.32</td>
<td>0.41</td>
<td>4.08</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represented the lowest level of attending and 5 the highest.
Table 3. O.S.C.E. Scores for empathy

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Counselling Group</td>
<td>2.50</td>
<td>0.62</td>
<td>2.79</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>2.75</td>
<td>1.01</td>
<td>3.00</td>
</tr>
<tr>
<td>Control Group</td>
<td>2.92</td>
<td>0.91</td>
<td>3.03</td>
</tr>
<tr>
<td>Total sample</td>
<td>2.75</td>
<td>0.87</td>
<td>2.94</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represented the lowest level of empathy and 5 the highest.

Table 4. O.S.C.E. Scores for intuitive empathy

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Counselling Group</td>
<td>1.96</td>
<td>0.97</td>
<td>2.54</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>2.12</td>
<td>1.15</td>
<td>2.68</td>
</tr>
<tr>
<td>Control Group</td>
<td>2.67</td>
<td>1.04</td>
<td>2.63</td>
</tr>
<tr>
<td>Total sample</td>
<td>2.32</td>
<td>1.08</td>
<td>2.61</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represented the lowest level of intuitive empathy and 5 the highest.
Table 5. O.S.C.E. Scores for doctor-centredness.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Counselling Group</td>
<td>4.21</td>
<td>0.38</td>
<td>3.68</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>4.00</td>
<td>0.48</td>
<td>3.71</td>
</tr>
<tr>
<td>Control Group</td>
<td>3.97</td>
<td>0.64</td>
<td>3.70</td>
</tr>
<tr>
<td>Total sample</td>
<td>4.05</td>
<td>0.53</td>
<td>3.70</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represented the lowest level of doctor-centredness and 5 the highest.

Table 6. O.S.C.E. Scores for patient-centredness.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Counselling Group</td>
<td>2.54</td>
<td>0.80</td>
<td>3.14</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>2.46</td>
<td>1.06</td>
<td>3.07</td>
</tr>
<tr>
<td>Control Group</td>
<td>2.90</td>
<td>0.98</td>
<td>3.00</td>
</tr>
<tr>
<td>Total sample</td>
<td>2.67</td>
<td>0.96</td>
<td>3.06</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represented the lowest level of patient-centredness and 5 the highest.
Table 7. O.S.C.E. Scores for overall communication skills:

<table>
<thead>
<tr>
<th></th>
<th>Pre-test Mean</th>
<th>Pre-test S.D.</th>
<th>Post-test Mean</th>
<th>Post-test S.D.</th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counselling Group</td>
<td>4.57</td>
<td>1.30</td>
<td>5.14</td>
<td>1.34</td>
<td>0.57</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>5.04</td>
<td>1.85</td>
<td>5.25</td>
<td>1.17</td>
<td>0.21</td>
</tr>
<tr>
<td>Control Group</td>
<td>5.25</td>
<td>1.72</td>
<td>5.17</td>
<td>1.64</td>
<td>-0.08</td>
</tr>
<tr>
<td>Total sample</td>
<td>4.99</td>
<td>1.64</td>
<td>5.19</td>
<td>1.40</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Ratings were on a 9-point response scale, where 1 represented the lowest level of communication skills and 9 the highest.

*Patient-centredness*

Table 6 gives mean scores on the Patient-centredness dimension for the three groups of participants at pre- and post-test. A t-test shows that Patient-centredness scores for the whole sample increased significantly from pre- to post-test ($t(47)=2.73, p<0.01$).

*Overall communication skills*

Table 7 gives mean scores on the overall communication skills for the three groups of participants at pre- and post-test. A t-test shows that overall communication skills scores for the whole sample increased non-significantly from pre- to post-test ($t(47)=0.76, n.s.$).

*Actor/Actress ratings of participants’ communication skills*

Results for the five dimensions rated by the actors and actresses will be presented in turn. On none of these dimensions was there a significant effect of group or group x time interaction, (again hypothesis 1 is not upheld); t-test figures will be reported comparing the means at pre- and post-test for the whole sample.
Understanding of the patient

Table 8 gives mean scores for each group at pre- and post-test on how much the actor/actress felt the ‘doctor’ understood his or her problems. A t-test shows a significant increase in this dimension for the whole sample from pre- to post-test (t(47)=2.86, p<0.01).

Confidence in the doctor

Table 9 gives mean scores for each group at pre- and post-test on how much the actor/actress felt he/she could have confidence in the ‘doctor’. A t-test shows a non-significant increase in this dimension for the whole sample from pre- to post-test (t(47)=1.81, n.s.).

Receptivity towards the patient

Table 10 gives mean scores for each group at pre- and post-test on how much the actor/actress felt the ‘doctor’ was receptive towards him/her. A t-test shows a significant increase in this dimension for the whole sample from pre- to post-test (t(47)=2.03, p<0.05).

Patient having to hold back

The actors/actresses gave a rating of how much they felt they had to hold back when talking to the participants. Table 11 gives mean scores on this dimension at pre- and post test for each group. A t-test shows there was a non-significant decrease in scores for the whole sample (t(47)=1.22, n.s.).
Overall communication skills

The actors/actresses gave a rating of how good the doctor's communication skills were overall. Table 12 gives means on this dimension for each group at pre- and post-test. A t-test shows a significant increase in scores from pre- to post test for the whole sample (t(47)=3.6, p<0.01).

Table 8: Actress scores for doctor's understanding.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Counselling Group</td>
<td>2.36</td>
<td>1.22</td>
<td>2.86</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>2.71</td>
<td>1.38</td>
<td>3.50</td>
</tr>
<tr>
<td>Control Group</td>
<td>2.60</td>
<td>1.46</td>
<td>3.30</td>
</tr>
<tr>
<td>Total sample</td>
<td>2.56</td>
<td>1.35</td>
<td>3.23</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represented the lowest level of understanding and 5 the highest.

Table 9: Actress scores for confidence in the doctor.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>Counselling Group</td>
<td>2.57</td>
<td>1.09</td>
<td>3.00</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>2.79</td>
<td>1.42</td>
<td>3.29</td>
</tr>
<tr>
<td>Control Group</td>
<td>2.75</td>
<td>1.41</td>
<td>3.05</td>
</tr>
<tr>
<td>Total sample</td>
<td>2.71</td>
<td>1.30</td>
<td>3.10</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represented the lowest level of confidence in the doctor and 5 the highest.
Table 10. Actress scores for doctor receptivity.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean S.D.</td>
<td>Mean S.D.</td>
<td></td>
</tr>
<tr>
<td>Counselling Group</td>
<td>3.14 0.95</td>
<td>3.21 1.31</td>
<td>0.07</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>3.43 1.02</td>
<td>3.86 0.66</td>
<td>0.43</td>
</tr>
<tr>
<td>Control Group</td>
<td>3.30 1.26</td>
<td>3.80 1.10</td>
<td>0.50</td>
</tr>
<tr>
<td>Total sample</td>
<td>3.29 1.09</td>
<td>3.65 1.08</td>
<td>0.36</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represented the lowest level of receptivity and 5 the highest.

Table 11: Actress scores for having to hold back.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean S.D.</td>
<td>Mean S.D.</td>
<td></td>
</tr>
<tr>
<td>Counselling Group</td>
<td>2.92 0.86</td>
<td>2.43 1.22</td>
<td>-0.49</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>2.43 1.02</td>
<td>2.07 1.07</td>
<td>-0.36</td>
</tr>
<tr>
<td>Control Group</td>
<td>2.55 1.47</td>
<td>2.45 1.23</td>
<td>-0.10</td>
</tr>
<tr>
<td>Total sample</td>
<td>2.62 1.19</td>
<td>2.33 1.17</td>
<td>-0.29</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represented the lowest level of having to hold back and 5 the highest.
Table 12: Actress scores for overall communication skills

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>counselling group</td>
<td>2.79</td>
<td>1.05</td>
<td>3.43</td>
</tr>
<tr>
<td>psychodynamic group</td>
<td>2.93</td>
<td>1.14</td>
<td>3.64</td>
</tr>
<tr>
<td>control group</td>
<td>2.95</td>
<td>1.32</td>
<td>3.45</td>
</tr>
<tr>
<td>total sample</td>
<td>2.90</td>
<td>1.17</td>
<td>3.50</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represented the lowest level of communication skills and 5 the highest.

Attitudes to patients

Attitudes to patients were measured by means of a questionnaire comprising four patient vignettes. For each of these four hypothetical patients, participants answered two questions, 'How happy would you be to treat this patient?' and 'How much would you enjoy treating this patient?' Thus there were eight questions on the questionnaire. Tables 13-20 present means for each group at pre- and post-test for each of these 8 questions separately. Analyses of variance for each of these questions show no significant group effect; nor are there any significant effects of time (pre- to post-test) for the whole sample. Hypothesis 2 is not upheld.
### Table 13: Negative Transference Vignette
Means for each group on Question 1: Willingness to treat

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
</tr>
<tr>
<td>Counselling Group</td>
<td>3.93</td>
<td>0.83</td>
<td>3.71</td>
<td>0.83</td>
<td>-0.22</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>3.43</td>
<td>1.02</td>
<td>3.29</td>
<td>0.91</td>
<td>-0.14</td>
</tr>
<tr>
<td>Control Group</td>
<td>3.45</td>
<td>0.76</td>
<td>3.50</td>
<td>1.05</td>
<td>0.05</td>
</tr>
<tr>
<td>Total sample</td>
<td>3.58</td>
<td>0.87</td>
<td>3.50</td>
<td>0.94</td>
<td>-0.08</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represents the lowest level of willingness to treat, and 5 the highest.

### Table 14: Negative Transference Vignette
Means for each group on Question 2: Anticipated enjoyment of treating.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
</tr>
<tr>
<td>Counselling Group</td>
<td>2.92</td>
<td>1.07</td>
<td>2.67</td>
<td>1.12</td>
<td>-0.25</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>2.71</td>
<td>0.99</td>
<td>3.07</td>
<td>1.21</td>
<td>0.36</td>
</tr>
<tr>
<td>Control Group</td>
<td>2.75</td>
<td>1.02</td>
<td>2.43</td>
<td>1.02</td>
<td>-0.32</td>
</tr>
<tr>
<td>Total sample</td>
<td>2.79</td>
<td>1.01</td>
<td>2.55</td>
<td>1.10</td>
<td>-0.24</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represents the lowest level of anticipated enjoyment in treating, and 5 the highest.
Table 15: Positive Transference Vignette
Means for each group on Question 1: Willingness to treat.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
</tr>
<tr>
<td>Counselling Group</td>
<td>3.50</td>
<td>1.34</td>
<td>3.07</td>
<td>1.14</td>
<td>-0.43</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>3.29</td>
<td>1.20</td>
<td>2.86</td>
<td>0.95</td>
<td>-0.43</td>
</tr>
<tr>
<td>Control Group</td>
<td>3.40</td>
<td>0.88</td>
<td>3.35</td>
<td>0.99</td>
<td>-0.05</td>
</tr>
<tr>
<td>Total sample</td>
<td>3.40</td>
<td>1.11</td>
<td>3.12</td>
<td>1.02</td>
<td>-0.28</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represents the lowest level of willingness to treat, and 5 the highest.

Table 16: Positive Transference Vignette
Means for each group on Question 2: Anticipated enjoyment of treating.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
</tr>
<tr>
<td>Counselling Group</td>
<td>3.00</td>
<td>1.18</td>
<td>3.43</td>
<td>1.09</td>
<td>0.43</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>2.86</td>
<td>1.03</td>
<td>2.93</td>
<td>1.07</td>
<td>0.07</td>
</tr>
<tr>
<td>Control Group</td>
<td>3.10</td>
<td>0.79</td>
<td>3.05</td>
<td>1.05</td>
<td>-0.05</td>
</tr>
<tr>
<td>Total sample</td>
<td>3.00</td>
<td>0.97</td>
<td>3.13</td>
<td>1.06</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represents the lowest level of anticipated enjoyment in treating, and 5 the highest.
Table 17: Countertransference Vignette
Means for each group on Question 1: Willingness to treat.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
</tr>
<tr>
<td>Counselling Group</td>
<td>3.86</td>
<td>1.03</td>
<td>3.86</td>
<td>0.66</td>
<td>0.00</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>3.43</td>
<td>1.09</td>
<td>3.29</td>
<td>0.99</td>
<td>-0.14</td>
</tr>
<tr>
<td>Control Group</td>
<td>3.75</td>
<td>0.72</td>
<td>3.80</td>
<td>0.77</td>
<td>0.05</td>
</tr>
<tr>
<td>Total sample</td>
<td>3.69</td>
<td>0.93</td>
<td>3.67</td>
<td>0.83</td>
<td>-0.02</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represents the lowest level of willingness to treat, and 5 the highest.

Table 18: Countertransference Vignette
Means for each group on Question 2: Anticipated enjoyment of treating.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
</tr>
<tr>
<td>Counselling Group</td>
<td>3.14</td>
<td>0.95</td>
<td>3.29</td>
<td>0.91</td>
<td>0.15</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>2.71</td>
<td>1.33</td>
<td>2.64</td>
<td>1.21</td>
<td>-0.07</td>
</tr>
<tr>
<td>Control Group</td>
<td>3.05</td>
<td>0.89</td>
<td>2.90</td>
<td>0.91</td>
<td>-0.15</td>
</tr>
<tr>
<td>Total sample</td>
<td>2.98</td>
<td>1.04</td>
<td>2.94</td>
<td>1.02</td>
<td>-0.04</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represents the lowest level of anticipated enjoyment in treating, and 5 the highest.
Table 19: Neutral Vignette
Means for each group on Question 1: Willingness to treat.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
</tr>
<tr>
<td>Counselling Group</td>
<td>4.36</td>
<td>0.63</td>
<td>4.50</td>
<td>0.65</td>
<td>0.14</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>4.57</td>
<td>0.65</td>
<td>4.43</td>
<td>0.76</td>
<td>-0.14</td>
</tr>
<tr>
<td>Control Group</td>
<td>4.65</td>
<td>0.59</td>
<td>4.55</td>
<td>0.60</td>
<td>-0.10</td>
</tr>
<tr>
<td>Total sample</td>
<td>4.54</td>
<td>0.62</td>
<td>4.50</td>
<td>0.65</td>
<td>-0.04</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represents the lowest level of willingness to treat, and 5 the highest.

Table 20: Neutral Vignette
Means for each group on Question 2: Anticipated enjoyment of treating.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
</tr>
<tr>
<td>Counselling Group</td>
<td>4.14</td>
<td>0.77</td>
<td>4.36</td>
<td>0.84</td>
<td>0.22</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>4.28</td>
<td>0.73</td>
<td>4.43</td>
<td>0.65</td>
<td>0.15</td>
</tr>
<tr>
<td>Control Group</td>
<td>4.40</td>
<td>0.68</td>
<td>4.20</td>
<td>0.52</td>
<td>-0.20</td>
</tr>
<tr>
<td>Total sample</td>
<td>4.29</td>
<td>0.71</td>
<td>4.31</td>
<td>0.66</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Ratings were on a 5-point response scale, where 1 represents the lowest level of anticipated enjoyment in treating, and 5 the highest.
Psychological-mindedness

Table 21 presents means for each group at pre- and post-test on the rating of psychological mindedness derived from their responses on the Patient's Problem Questionnaire. An analysis of variance revealed no significant effect of group or group × time interaction. Hypothesis 3 is not upheld. However, a t-test shows that on the whole sample, there is a significant effect of time (from pre- to post-test), i.e. participants as a whole became significantly more psychologically minded (t(47)=3.43, p<0.01).

Satisfaction with courses

Participants in each of the two courses (Counselling Skills and Psychodynamic) were asked to fill in a Consumer Satisfaction Questionnaire at the end of the second and last afternoon of the course. The questionnaire comprised five questions. Table 22 presents mean responses to each question for each group and t-values showing a comparison of the two groups in terms of their answers to each question.
Table 21: Psychological-mindedness
Means for each group on Patient’s Problem Questionnaire.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Change in mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
</tr>
<tr>
<td>Counselling Group</td>
<td>2.43</td>
<td>1.34</td>
<td>3.07</td>
<td>0.83</td>
<td>0.61</td>
</tr>
<tr>
<td>Psychodynamic Group</td>
<td>2.50</td>
<td>1.02</td>
<td>3.21</td>
<td>0.58</td>
<td>0.71</td>
</tr>
<tr>
<td>Control Group</td>
<td>2.85</td>
<td>1.23</td>
<td>3.10</td>
<td>1.02</td>
<td>0.25</td>
</tr>
<tr>
<td>Total sample</td>
<td>2.62</td>
<td>1.20</td>
<td>3.12</td>
<td>0.84</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Ratings were on a 4-point response scale, where 1 represents the lowest level of anticipated enjoyment in treating, and 4 the highest.

Table 22: Participants’ satisfaction with courses

<table>
<thead>
<tr>
<th></th>
<th>Counselling Course</th>
<th>Psychodynamic Course</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>1. Overall quality of course</td>
<td>2.67</td>
<td>0.49</td>
<td>3.46</td>
</tr>
<tr>
<td>2. Was it the kind of course you wanted?</td>
<td>2.67</td>
<td>0.49</td>
<td>3.5</td>
</tr>
<tr>
<td>3. Would you recommend it to a colleague?</td>
<td>3.08</td>
<td>0.67</td>
<td>3.77</td>
</tr>
<tr>
<td>4. Helpful in dealing with patients?</td>
<td>3.08</td>
<td>0.29</td>
<td>3.38</td>
</tr>
<tr>
<td>5. How satisfied were you?</td>
<td>2.67</td>
<td>0.49</td>
<td>3.31</td>
</tr>
</tbody>
</table>

The table shows mean responses from a 4-point response format where 1 represented the lowest level of satisfaction, 4 the highest.

*p<0.05; **p<0.01.
DISCUSSION

This research was a randomised controlled trial to investigate the differences between the effects on medical students' communication skills of three different conditions: teaching them a short course in counselling skills, a short course in psychodynamic concepts, or allocating them to a wait-list control group. It was expected that the courses taught would have different effects on the participants' observable communication skills, on their attitudes to patients, and on their psychological-mindedness - their ability to understand the psychological factors underlying the patients' ostensibly physical presentations. Communication skills were tested before and after the courses by means of an Objective Standard Clinical Examination (O.S.C.E.), i.e. a five minute interaction with an actor or actress playing the part of a patient. (Audiotape recordings of these interactions were rated on a series of aspects of communication skills by two raters.) Immediately after each interaction, the actors and actresses playing the patients were asked to fill in questionnaires eliciting their perceptions of the participants' communication skills. Attitudes were measured by means of a questionnaire filled in by each participant at pre- and post-test eliciting responses to four vignettes of hypothetical patients; and psychological-mindedness was measured by means of the participants' responses on a Patients' Problem Questionnaire. A measure of participants' satisfaction with the two courses taught was also obtained.
The main findings were as follows:

(1) Participants’ communication skills were measured on six dimensions by the raters assessing the recordings of the O.S.C.E.s. Three measures showed statistically significant changes for all three groups overall between pre- and post-test: participants were more patient-centred, less doctor-centred, and attended less to the patient at post-test than at pre-test. On the remaining measures, there were small but non-significant changes in the predicted direction: i.e. the participants were rated slightly higher on empathy, intuitive empathy and overall communication skills. However there were no statistically significant differences between the three groups of participants as regards how much they changed on any of the six dimensions.

(2) According to the questionnaires filled in by the actors and actresses, the participants overall became more understanding of the ‘patients’, more receptive, and overall had better communication skills at post-test than at pre-test. There were no significant differences on measures of how much the ‘patients’ felt they had to hold back, and how much confidence they had in the doctors. Again, there were no statistically significant differences between the three groups on these dimensions.

(3) Attitudes to patients were measured by means of a questionnaire designed to tap understanding of transference and countertransference. It was expected that the psychodynamic group, after being taught about transference and countertransference, would show an increased enthusiasm for treating the patients described in the short vignettes on the questionnaire: that is to say, it was anticipated that difficult issues
surrounding the way the patient communicates with the doctor would be less off-putting to the students once they had been given a framework for making sense of these communication difficulties. In fact there were no statistically significant changes over time in the attitudes to patients of the psychodynamic group, nor in the attitudes to patients of either of the other groups. Nor were there any differences between the three groups on this measure.

(4) Psychological-mindedness was measured by means of the Patient’s Problems Questionnaire, which asked the participants open questions about their perceptions of the patient’s problems and the causes of those problems. Overall the participants’ responses to these questions became more psychological over time: that is, their awareness of psychological factors underlying the patient’s symptoms increased. There were no statistically significant differences between the groups as regards how much they changed on this dimension from pre- to post-test.

(5) The satisfaction questionnaire filled in by participants at the end of each course showed that the Psychodynamic course was rated significantly more highly on dimensions of overall quality, whether it was the kind of course the participants wanted, whether they would recommend it to a colleague, and how satisfied they were. The Psychodynamic course was rated non-significantly more highly on how helpful it was in dealing with patients.

In summary, there is a consistent pattern across all the outcome measures. On three of the six dimensions on the O.S.C.E. ratings, three of the five dimensions on the actress
questionnaire, and on the psychological-mindedness measure, there was a time
difference for the overall sample but no group differences.

**O.S.C.E. ratings and Actress Questionnaire ratings**

Although on three of the O.S.C.E. measures (attending, doctor-centredness and patient-
centredness) there were statistically significant changes in the scores of the overall
sample from pre- to post-test, analyses of variance did not show the changes in the
experimental groups to be significantly greater than those in the control group. As
regards the results from the actor/actress questionnaires, there were statistically
significant increases in the actresses’ ratings of the participants’ receptivity, of the
extent to which they felt the doctor understood their problems, and of the participants’
communication skills overall; again, however, there were no significant differences
between the groups in terms of how much they changed from pre- to post-test.

These results suggest that there may be factors that the three groups had in common
which were causing the apparent changes in communication skills, i.e. factors other
than the two courses. There are a number of possible factors of this sort:

(a) Practice effects: it may have been that in the second (post-test) O.S.C.E. the
participants performed differently simply because it was the second time they had done
it: they were more familiar with the situation the second time, and may therefore have
been more relaxed; they may also have learned something from the experience of the
first O.S.C.E.
(b) Demand characteristics: i.e. the effects of knowing that they were participating in a psychological study of communication skills. By the time of the second O.S.C.E. the participants had had more time to think about the project and what might be expected of them.

(c) Concurrent events: e.g. the effects of teaching that may have been taking place in the medical school curriculum outside of the present research project. For most participants the interval between the two O.S.C.E.s was approximately four weeks and it seems unlikely that they were taught something during that time that impacted noticeably upon their communication skills. The present project was planned such that the pre-tests, teaching interventions and post-tests would all be completed before the beginning of a short module on communication skills that they were due to have as part of their normal curriculum; this would have been the most likely aspect of their course to interfere with the results of the present study. However it is not possible to be certain that their performance in the O.S.C.E.s was not affected by other aspects of their teaching.

(d) The possible effects of ‘leakage’ between the three groups. It is possible that the participants in the two teaching groups would have discussed the content of the courses with their peers in the control group; this may have improved the performance of the control group in the second O.S.C.E., thus reducing the differences between the two experimental groups and the controls.

There are, therefore, a number of possible reasons why the courses did not produce
significantly greater effects than were seen in the control group. The first three of the above possibilities assume that the courses may have had little or no effect on O.S.C.E. performance; the fourth that the improvements seen in all groups, including the control group, were at least partly attributable to the interventions. The individual courses will now be discussed on the first of these assumptions, that the courses failed to affect the participants’ communication skills.

The failure of the Counselling Skills course to bring about statistically significant changes in the communication skills of the participants in that group is perhaps surprising in the light of the many studies which show that short courses in communication skills are able to produce such changes (Evans, Stanley & Burrows, 1993; Maguire et al., 1978; Usherwood, 1993). The course was a practical course, focusing on classical counselling skills such as how to ask questions, how to demonstrate that you are listening, how to respond empathically and so on. If the participants had learnt such skills that learning should, arguably, have been detectable by the raters listening to recordings of the O.S.C.E.s.

There are a number of possible reasons why the communication skills of members of the Counselling Skills group did not improve significantly as measured by the O.S.C.E. ratings. Firstly, although the skills taught were similar to those taught on other courses evaluated in the literature, the methods of teaching may have been inadequate. Studies which compare the outcomes of different approaches to communication skills teaching (e.g. Maguire et al., 1978; see Introduction above) have generally concluded that the optimal approach is one which includes feedback for participants using audiotaped or
videotaped recordings of samples of their communication. The Counselling Skills course conducted for the present research included no such feedback; some of the exercises carried out in small groups in the course did involve participants giving each other feedback, and in addition the researcher, in the role of facilitator, offered advice to individuals encountering specific difficulties in the role plays. However, this is clearly a different experience from that of looking at yourself on video, and hearing advice based upon that. The lack of improvement in the skills of participants in the Counselling Skills group is therefore consistent with the idea that feedback of the kind advocated by Maguire et al. is necessary to produce the degree of self-awareness which leads to significant change in communicative behaviour.

Other reasons for the lack of significant improvements may include the lack of experience of the researcher as an instructor in Counselling Skills. The fact that the Counselling Skills course was considered less satisfactory than the Psychodynamic course by its participants supports the notion that there is room for improvement in the way the course was delivered, and a better taught course may have brought about greater improvements in skills. A project of this kind would perhaps ideally be based on courses taught by a more experienced tutor, since this would perhaps have optimised the possible benefits to be gained by participants.

A further possibility is that the participants did improve on the skills taught in the Counselling Skills course, but that the raters were unimpressed by those skills. For example, the participants were taught about empathic responding, and may to some extent have employed the relevant techniques in the post-test O.S.C.E.s, but when the
raters were asked to rate how empathic the participants were, they may not have felt that these techniques were indicative of genuine empathic feeling, and hence may have given them little credit for this behaviour. This would be consistent with a notion that skills as such do not contribute to a warm and meaningful human interaction, as suggested by Plum (1981).

The failure of participants in the Psychodynamic group to show improvements in O.S.C.E. performance relative to the control group is perhaps more understandable. The course did not focus on skills as such, but was designed to encourage the participants to look more thoughtfully than they had done previously at aspects of doctor-patient communication. The reasoning behind the prediction that this may enhance their communication skills was that if they began to think more carefully about the psychological aspects of the patient's communication, and the way that they as doctors and their patients were affecting each other, this may bring about a more sensitive, human interaction style with the patient - an interaction style based more upon an awareness of the patient as a person, and less exclusively upon diagnosis and treatment of diseases (Frenette & Blondeau, 1989; Shoenberg, 1992). The prediction, however, was that the effects of this course on O.S.C.E. scores would be smaller than the effects of the Counselling Skills course, since changes of the sort just described may be relatively subtle, and therefore not so readily observable in an O.S.C.E. as potential changes in interview behaviour resulting from a skills training approach. For this reason it is perhaps unsurprising that the Psychodynamic group showed no statistically significant gain in O.S.C.E. scores from pre- to post-test. Furthermore, unlike the Counselling Skills course, there is no literature which suggests that a course in
psychodynamic concepts will improve communication skills, so this does not contradict any existing research findings.

It remains possible that measurable changes may be obtainable after a longer course in psychodynamic perspectives on the doctor-patient relationship: that is to say, the course may simply have been too short. The way that the course was expected to influence their behaviour was through influencing their underlying understanding of patients; it may be that attempts to alter underlying attitudes and feelings towards patients may be successful if given more time to take effect.

The foregoing discussion is based on the fact that there were no statistically significant differences between the groups as regards how much they changed on any dimension, either on the questionnaire used by the actors/actresses, or the rating scale used by the raters assessing the O.S.C.E.s. However, further scrutiny of the means for each group on each rating is of interest: on empathy, intuitive empathy, patient-centredness, and overall communication skills, the changes in the two experimental groups were higher (though non-significantly) than the change in the control group. This suggests that slightly different effects may be taking place in the different groups, albeit they are too small to be statistically significant in a sample of this size. On the overall rating of the participants' communication skills (Dimension 6) the trends are exactly as predicted: the skills of the Counselling Skills group improved more than those of the Psychodynamic group, and they both improved more than the control group (which did not improve at all). Since the size of these effects is small and does not reach statistical significance, no firm conclusions can be drawn from these trends. However the fact that
the results on these measures show a trend in the predicted direction suggests that further research of this kind may be fruitful.

Examining the mean O.S.C.E. scores at pre- and post-test for the Psychodynamic group, the biggest changes are in patient-centredness (question 5) and intuitive empathy (question 3). Although these effects are again small and not statistically significant, it is nonetheless interesting to note that these are the dimensions on which this group improved most. Question 3 was included specifically with the intention that it may pick up changes particular to this group: it was surmised that discussion of unconscious communication in the Psychodynamic course might make them more sensitive to underlying issues in the patient's communications. However, the Counselling Skills group improved as much as the Psychodynamic group on this measure, so it is not possible to attribute the small improvements in the Psychodynamic group's score specifically to the discussion of unconscious communication in the course. Again as regards patient-centredness, the scores of the two experimental groups were extremely close together, so it may be that any changes in this dimension are attributable to having an opportunity, of whatever kind to reflect upon communication with the patient. However, as with other measures, the changes in patient-centredness are very small in the present study.

As regards the statistically significant reduction on the attending dimension from pre-to post-test, this result must be treated with caution, since there was a ceiling effect: the great majority of ratings on this dimension were either at 5 (the top of the scale) or one point below. However, it is of interest that all groups were rated as attending less at
post-test. This may be related to the slight increase in patient-centredness: if the interactions included more time devoted to the patient talking, the ‘doctors’ may have spoken less, and therefore had less opportunity to demonstrate that they were attending. Another possible explanation is that the students were trying to put into practice the skills they had learned in the courses, and may have been a little self-conscious about this - thus attending more to what they themselves were saying than what the ‘patients’ were saying.

Attitudes to patients

In general on the four vignettes, the mean rating for participants’ willingness to treat the patient was higher than their anticipated enjoyment in treating them. This is not surprising: according to a doctor’s Hippocratic oath, he or she should be willing to treat any patient, so ratings in this measure should be high. The pattern of results on the Attitudes to Patients Questionnaire was that in relation to the four patients presented in the brief vignettes, there were no statistically significant differences between the groups as regards how much they changed on these measures from pre- to post-test. Nor were there any significant differences in the overall sample from pre-test to post-test.

It is of interest, nonetheless, to comment briefly on the small changes that did occur, while bearing in mind that because the changes are not statistically significant, all such comments are tentative. There are almost no changes over time on the responses to the neutral or countertransference vignettes. As regards the positive transference vignette, the two experimental groups were slightly less willing to treat this patient at post-test.
than at pre-test. It is not clear why there is a small trend in this direction. It is possible that, since the participants were all students who as yet had had no experience of patients, the experience of thinking about communication with patients in the two teaching courses may have made them conscious for the first time of some of the potential difficulties in talking to patients. If so, then the slightly reduced scores for the experimental groups on willingness to treat the patient in the positive transference vignette may indicate a slightly increased realism. However, there is also a small increase in the Counselling Skills group’s expectation of enjoyment in treating this patient; the latter result may not be consistent with the notion that there was an increase in realism. In any case, these trends are small and not statistically significant.

As regards the negative transference vignette - perhaps the most challenging one, as the patient is hostile to the doctor’s advice - there are very small decreases in willingness to treat this patient in both experimental groups, but a small increase in the Psychodynamic group’s expectation of enjoying treating him. This is contrary to the other groups, whose anticipated enjoyment in treating him went down slightly at post test. This result could be interpreted in the light of the original hypothesis regarding the expected positive effects of the psychodynamic course on participants’ attitudes to patients; however, there is too little evidence of this kind of change to draw any such conclusion.

Altogether, however, the changes on the attitudes measures are extremely small. The expectation that the Psychodynamic group would show higher ratings on this questionnaire at post-test than they had at pre-test - i.e. would say that they were more
willing to treat the patients, and would expect more to enjoy treating them - was therefore not borne out.

In addition, there is no apparent relationship between changes in attitudes and observable communication skills; therefore the expectation that the Psychodynamic group’s communication skills would be indirectly enhanced through altering their attitudes received no support.

**Psychological-mindedness**

There was an improvement in psychological-mindedness in all groups between pre- and post-test, but again no statistically significant differences between the groups. The reasons for this may be similar to the reasons for the same pattern in the O.S.C.E. ratings: there may have been practice effects, demand characteristics, ‘leakage’ to the control group from the experimental groups; or concurrent events. However, as with some of the O.S.C.E. ratings, the effects are in the predicted direction: the increase in psychological-mindedness in the Psychodynamic group was greater than the increase in the Counselling Skills group, and the increases in both of these groups were greater than that in the control group. This perhaps implies that the courses were having an effect, albeit on the measure used a very small one. It is possible that the increase in psychological-mindedness was related to the increase in patient-centredness: if the participants were giving the ‘patients’ more time to pursue their own agendas the interactions would have been rated as more patient-centred; there would then also have been a tendency for the ‘patients’ to have spoken more about the problems that were concerning them - which were in the case of these role-plays psychological issues. Thus
the participants would have been more likely to write about psychological matters in the Patients' Problem Questionnaires. Once again, however, the small effect size on psychological-mindedness requires that such comments are made tentatively.

**Limitations of study**

The inter-rater reliability on the O.S.C.E. ratings was not high. This makes it difficult to interpret the results, and is therefore an important limitation of the study. Possibly more lengthy training of the two raters may have improved the inter-rater reliability.

In addition to the question of ratings of the O.S.C.E.s, there were a number of issues arising from the two teaching courses. First there is the question of the difficulty of teaching communication skills to students who had no experience with patients; some commented that with their lack of medical knowledge and experience, they simply didn't know what to say to the patient; the courses were not designed to teach them how to take a medical history, but unless the content of the interaction is in place it is harder to rate them on process dimensions such as empathy; if they do not know what to say to the patient the question of how empathically they say it is premature. From this point of view it would make more sense to carry out such a study at a later stage of medical training. A further benefit of this would be that when discussing difficulties in communication in the courses, the students would have clinical experience to reflect on, thus making the content of the courses more meaningful. However, given that some of the research which has shown that communication skills courses can be effective has been carried out with pre-clinical medical students, this is not necessarily a factor that has had a major effect on the present research.
Another factor which may have influenced the results of the study is the self-selected nature of sample. The participants were recruited through making an announcement in a lecture theatre containing approximately 195 medical students. The 48 who participated in the entire study may well have been the ones who, prior to the research, thought communication skills important. It is possible that the outcome of the study would have been different if it had been possible to take a random sample of 48 participants from the larger group. If those that agreed to participate were predisposed to think of communication skills as important, they may also have been already relatively good communicators. It is possible, therefore, that with a randomly selected sample there may have been a greater number of medical students with a lower base level of communication skills, and the short interventions may have had a larger effect on their skills. There would, however, be ethical and practical problems in using a randomly selected sub-set of a year group as the participants for the study. A solution to this may be to use the entire year group. In this case it would have to be set up as a compulsory part of the syllabus, and the researcher(s) would have to ensure that the project was compatible with syllabus requirements and that no student (for example if allocated to a control group) missed out on teaching that the medical school considered desirable or required.

An approach such as that just outlined would also have the benefit of greatly increasing the sample size: given the small effect sizes in the present research, this would be highly advantageous.

A further point regarding the sample was that, given the small effect size found, it
would have been preferable to start with a larger sample. A similar study in the future might benefit from a larger sample, though ethically and practically it may be difficult to use a randomly selected sub-set of a year-group as the participants for such a study.

A more experienced teacher could be used to teach the two courses. The selection of an ideal teacher obviously causes some problems; it was decided for the present study that both courses should be taught by the same teacher, avoiding the difficulty that otherwise the post-test ratings may merely be measuring the difference between the effects of being taught by two different people, rather than the effects of being taught two different things. However, even in this study, the same teacher (the researcher) received quite different feedback for the two courses; they were rated as significantly different in quality. Thus even ensuring that the courses are taught by a single teacher does not eliminate possible differences in quality of teaching.

The quality of teaching is also influenced by the constitution of the group being taught. In the Counselling Skills group in the present project, there was one participant who tended to monopolise the group by asking questions and making comments. Some of the qualitative remarks made on the Satisfaction Questionnaire suggest that other participants were frustrated by this; it is possible that this not only reduced participants' satisfaction with the course but also affected the outcome - i.e. in the absence of the participant concerned, members of this group may have showed greater gains in communication skills at post-test. Working with a larger sample, a larger number of groups would be allocated to the Counselling Skills condition, and the effects of this kind of occurrence would be minimised.
As regards the measures used, the attitudes measure detected no significant changes; it is possible that more complex measures are needed to detect changes in attitude in future.

Implications for further research

The present study has drawn attention to a possible broader outlook on the question of how to teach doctor-patient communication to medical students. It has been suggested that encouraging medical students to consider their relationships with patients more thoughtfully may have an impact on their communication with patients which is perhaps more deep-seated than the effects of the conventional counselling skills approach (e.g. Lloyd & Bor, 1996). This has been investigated using psychodynamic concepts as the means for promoting this more thoughtful awareness of patients in the minds of the medical students. The results are inconclusive. Both of the two courses in the present study have had effects on the communication skills of the participants which were statistically indistinguishable from the effects of being part of the wait-list control group. However, since there are small (statistically insignificant) effects in the predicted direction, it may be fruitful to pursue further research of a similar nature.

If the experiment were to be repeated, it may be that it would be valuable to give consideration to the nature of the input given to the psychodynamic group. For example, if an attempt is being made to influence participants’ attitudes to patients the course may need to be rather longer. It may also be beneficial to teach it to students who are seeing patients so that they could bring cases to discuss; this would make the teaching more experiential. The type of course thus produced would then approximate
to a Balint group of the sort used by Frenette and Blondeau (1989) at Laval University - in that case an 8 month course. The medical students on that course are given an opportunity to complete an end-of-course evaluation questionnaire, and Frenette and Blondeau claim that their responses suggest that most of them are more able to understand the concept of global medicine, considering the psychological, social and somatic aspects; more disposed to listen to patients and try to understand their version; more inclined to accept patients for treatment whom they would have declined previously; more at ease with most of their patients; and so on. These responses suggest that the participants in Frenette and Blondeau’s programme, if given pre-tests and post-tests using the measures employed in the present study, might well show increases on all measures. Frenette and Blondeau acknowledge that it is difficult to measure the influence of the course using a questionnaire. It would be most interesting to research a course of that sort using observational measures such as the O.S.C.E.s used in the present study.

A further application of psychodynamic theory to the question of medical communication would be to give the participant a psychoanalytical consultation. It is possible that one of the difficulties in the doctor-patient relationship is that the doctor is highly defended against his/her own anxieties, and that this inhibits communication with the patient. If this is correct, it would be interesting to measure by pre- and post-tests the effects of a consultation aimed at enabling the doctor or medical student to become more aware of his/her unconscious defences. Coombs advocates support for doctors enabling them to express the anxieties and stresses they are under. The suggestion just advanced of a psychoanalytical consultation could perhaps be seen as
a more psychoanalytically oriented extension of Coombs’s idea.

It would also be interesting to evaluate the approach of Shoenberg (1992), which takes another step in terms of doctors experiencing a psychodynamic model - unlike participants in a Balint group, who discuss the psychological (and psychodynamic) aspects of their cases, the participant’s in Shoenberg’s programme take the further step that they assume the role of psychotherapist. Shoenberg claims that his participants become more caring and sensitive doctors but these interesting claims are as yet unresearched.

**Professional implications**

The purpose of the present study was, in the context of a gradually increasing acceptance in medical education of the importance of communication skills, to open up for discussion the question of whether it would be valuable to consider alternative approaches to the subject of the doctor-patient relationship, in particular approaches such as a psychodynamic one which we have suggested may have potential for enhancing medical students’ attitudes to patients, and thus indirectly develop their ability to communicate with patients.

The results of the present research are inconclusive. No evidence has been found to support an argument that, compared with a counselling skills approach, the teaching of psychodynamic concepts is a valuable alternative or additional method of enhancing communication skills in medical students. Nonetheless it is suggested that there is sufficient evidence in the results of this study to encourage further research in the area.
REFERENCES


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Dear Dr Barker

Study No: 96/3446 (Please quote in all correspondence)
Title: Enhancing communication skills and psychological understanding of patients: a randomised controlled study with medical students

Many thanks for submitting your departmental insurance code for the purposes of the above study. I now write to let you know that I have given your project Chairman's Approval and you may go ahead with your study.

Please note that it is important that you notify the Committee of any adverse events or changes (name of investigator etc) relating to this project. You should also notify the Committee on completion of the project or indeed if the project is abandoned. Please remember to quote the above number in all correspondence.

Yours sincerely

Andre McLean
Chairman
APPENDIX B: Information sheet for participants

UNIVERSITY COLLEGE LONDON

Enhancing Communication Skills and Psychological Understanding of Patients:
A randomised controlled trial with medical students.

Dear Medical Student,

I am inviting you to participate in a research study relating to the subject of how communication skills are taught to medical students. It is hoped that the study may assist in designing enhancements to the medical curriculum.

The study aims to assess the relative efficacy of two different approaches to teaching communication skills to medical students. The first approach is a course in basic communication skills. The second is a course in psychodynamic concepts.

All volunteers who participate in the study will be asked to perform an O.S.C.E. (Objective Structured Clinical Examination) at the beginning and end of the course. This will involve a short interaction with somebody role-playing a patient, which will be audiotaped. The tapes will be analysed for communication skills, so as to measure any improvements in communication skills brought about by the two courses.

Participants will be randomly assigned to one of these two groups, or to a third group, which will act as a control group. This group will receive communication skills training after the two O.S.C.E.s.

Participants will also fill out short questionnaires about attitudes to patients.

All information given on questionnaires, and the tapes of the O.S.C.E.s, will remain confidential. No identifying information about individual participants will be published in any form.

You do not have to take part in this study if you do not want to. If you decide to take part you may withdraw at any time without having to give a reason. The research does not constitute part of your formal medical training and your decision whether to take part will not affect your course in any way.

All proposals for research using human subjects are reviewed by an ethics committee before they can proceed. This proposal was reviewed by U.C.L./U.C.L.H. ethics committee.

Please retain this information sheet. You may contact the researchers via the telephone number below.

Nick Rhodes
Post-graduate Clinical Psychologist in Training,
Sub-Department of Clinical Health Psychology
Tel: 0171-380 7897. E-mail: n.rhodes@ucl.ac.uk
APPENDIX C

CONSENT FORM


Investigator: Nick Rhodes

To be completed by the volunteer:

1. Have you read the information sheet about the study? YES/NO
2. Have you had an opportunity to ask questions and discuss this study? YES/NO
3. Have you received satisfactory answers to all your questions? YES/NO
4. Have you received enough information about the study? YES/NO
5. Which investigator have you spoken to about the study?.............................
6. Do you understand that you are free to withdraw from this study
   *at any time
   *without giving a reason for withdrawing
   *without affecting any aspect of your assessment as a medical student YES/NO
7. Do you agree to take part in this study? YES/NO

Signed.........................................................Date.............................

Name in block letters.................................................................

Investigator.................................................................................

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APPENDIX D: Instructions to participants at testing

University College London

Research Project 1996-1997: Enhancing Communication Skills and Psychological Understanding of Patients

Instructions to participants prior to seeing the 'patient'

Please imagine that you are working as a General Practitioner in a health centre.

The person you are about to see is not a real patient, but is playing the part of a patient. Before he/she comes into the room, you do not know what he/she has come to see you about. You will have five minutes to talk to the patient, and a tape recorder will record the interaction. After the five minutes a timer will go off to indicate the end of the interaction. You should then say something like “I’m sorry, Mr/s.................., we have run out of time”. Anything you say after the timer goes off will not be of interest to the researchers.

Afterwards the ‘patient’ will leave the room. At this point please stay in the room and fill in Questionnaire A, which is about the ‘consultation’ with the ‘patient’.

Then when you leave the room, we will ask you to fill in Questionnaire B. This will be explained to you when it is given to you.
APPENDIX E(1): Instructions to actress

University College London


Instructions to actress 1

You are Ann Davies, a single mother aged 35, and you work as a cashier in a bank.

Your first line when the doctor asks you what the matter is will be: “I’ve been getting really short of breath lately and I’m frightened there’s something seriously wrong”.

This problem of shortness of breath has been occurring for about nine months. It happens at work, especially during busy periods at the counter. The shortness of breath is usually accompanied also by a sort of pounding sensation in your heart. A couple of times you have felt so bad that you have closed down your position at the counter with a queue of customers waiting. This happened last week; afterwards, your supervisor asked you if you were all right. On the face of it this showed concern, but reading between the lines you felt that he had doubts about your suitability for the job, and you think he may now be keeping an eye on your work. It is this most recent development that made you come to see the doctor.

You have one son, David, aged 14, and a daughter, Julie, aged 12. Your son’s teacher telephoned you last month expressing concern about your son as he seemed inattentive at school and had been seen associating with other boys who were known to have been experimenting with drinking alcohol and glue-sniffing. If you are honest with yourself you have thought recently that David seemed to be behaving differently - a bit less communicative with you, for example, and a bit lazier - but you have sort of put it out of your mind. Your main thought about it - as always when you are concerned about David - is that you resent the failure of your ex-partner to give you more support with the boy. You do not feel you can turn to him for any help, and feel very much 'on your own' with the children. You don't live near your parents and don't get on with them anyway. Your daughter has also seemed a bit down lately though you are not aware that she has any problems. You think she might be upset about changes that she might have noticed in her brother.

Other information:
You split up with your partner, Gary, the father of your two children, eight years ago. You see him about once a month when the children go to spend a weekend with him, though you hardly spend any time with him yourself. You have never really forgiven him for the things that happened around the time you split up. (He was seeing another woman.) He has had various relationships since, and his current partner seems more or less to have moved in to his flat; you have never had another relationship since he left; it always seemed difficult because of the kids.

You live in a small two bedroomed terraced house, which is owned by a housing association. It isn’t too bad though you wish they would put a bit more effort into the maintenance of the place.
**Health history:**
Five years ago you had to go into hospital. You thought at first that you had food poisoning, but there were stomach pains that wouldn’t go away for a long time and the doctors seemed unsure of what it was, even after you got better. It took you a long while to feel well again after that. You had other problems since, which one doctor described as irritable bowel syndrome. You are not sure if this is connected to the previous illness.

You smoke about ten cigarettes a day. You drink very little. You are not on any medication.

**Psychiatric history:**
You had a period of depression after you split up with your partner eight years ago. You were given anti-depressants, and after quite a few months the depression lifted somewhat. You have always been a little bit frightened that it might come back.

**Note to actress re disclosure of information:**
The information you have about yourself is to be disclosed to the doctor gradually, using the following as a guide.

(a) To any initial enquiry such as “Has anything changed lately?” or “Is anything worrying you?”, you should first of all answer in terms of your worries about work.

(b) If the doctor mentions your social situation, you should then reveal that you don’t have much social support; since your husband left you have felt very much ‘on your own’.

(c) If the doctor stays with this area, you should reveal that you are particularly despondent about being on your own because you would like some support with the children.

(d) If the doctor asks if you have any worries about your children, you should hesitantly reveal that you do - i.e. David’s recent behaviour and the phone call from school. You are a bit reluctant to talk about these concerns, because you feel guilty about this - you feel maybe there are things you could have done to avoid him getting in with that crowd, though you aren’t sure what. However if the doctor asks, you should discuss it. In fact your symptoms are essentially psychological - they are anxiety-related - but at the time of this visit to the doctor you are wanting to ask about the shortness of breath, which you are assuming is some physical illness.

**General points**
It is likely that some - even perhaps most - of the ‘doctors’ will not elicit much of the information given above. Do not feel that you should have discussed all of it by the end of the interview.

It is quite possible that some of them will ask questions whose answers are not given in the above ‘script’. If so, please improvise an answer; however, if you do this, please try to remember what you said, jot it down, and give the same answer if another ‘doctor’ asks the same thing.
APPENDIX E(2): Instructions to actress

University College London


Instructions to actress 2

Your name is Mrs Barbara Harvey. You are a 58-year old secretary.

Your first line when the doctor asks you what the matter is will be: “I'm feeling tired all the time - it's not like normal tiredness, I think it must be an illness”.

You have been feeling so tired that you find it hard sometimes to get up in the mornings and go to work. It hasn't been all that busy at work lately, but even the work you have had seems hard to get done - everything seems to be taking longer than usual because of the tiredness. Somehow when you're that tired you forget to do some job like ordering stationery or making a phone call. This has knock-on effects in the office and annoys you and your colleagues.

The problem has been going on for about 6 months as far as you recall. The reason you came to the GP now is that it seems worse than ever and people seem to be noticing at work.

Last December your husband, Terry, died suddenly of a heart attack. The funeral was a week or two before Christmas. You spent Christmas with your daughter, Linda, and her family in Scotland. It seemed like a good idea because your daughter was nice to you and her young children didn’t know your wife very well and didn’t really understand what had happened, so you could be around people who were having a good Christmas and take your mind off your late wife. After the Christmas holiday you went back to work as usual.

Other information
You had been married to Terry for 35 years and have two children: Linda and Peter. Linda is 32 and married to Robert, an engineer. They have two children aged 4 and 2 and live in Scotland: they moved up there some years ago because of Robert’s work. You get on all right with Linda, although when she moved up to Scotland she had had some arguments with Terry, who didn’t like the idea of her being so far away: this was especially so as at the time they moved, Linda was pregnant with her first child, and Terry assumed he would see much less of his grandchild than he would if Linda had stayed in London.

Peter is 29 and currently unemployed. Before Terry died, you had hoped that Peter would work with him in his electrical business but he always said he didn’t want to do that. He has worked in small building companies But doesn’t seem to get steady work and you don’t understand why.

You still live in the house where you lived when the children were at school. The garden got quite overgrown this year without Terry to look after it - he always did the garden - but you haven’t had the energy to do anything about it.
**Health history**
You were advised by a doctor about five years ago that you should improve your diet and stop smoking. You made some improvements on both of these things you smoke very little now - but since Terry died you have paid very little attention to your diet. In fact you have been eating less than usual and have lost a bit of weight. You don’t drink very much at all.

You are not on any medication at present.

**Psychiatric history**
When your parents died - within a short time of each other, in the early 1980s - you felt very low for quite a while but didn’t consult a doctor about it as you thought there was nothing they would be able to do about it.

**Note to actress re disclosure of information:**
The information you have about yourself is to be disclosed to the doctor *gradually*, using the following as a guide.

(a) To any initial enquiry such as “Has anything changed lately?” or “Is anything worrying you?”, you should first of all answer in terms of your worries about your slowness at work.

(b) If the doctor asks if anything else is worrying you, you should say that the state of the garden is getting on top of you, because you haven’t had the energy to attend to it.

(c) If the doctor stays with this area, you should add that it was your late husband that always did the garden when he was alive.

(d) If the doctor asks whether you are unhappy about the loss of your husband, you should hesitantly agree that you are. You have generally been reluctant to talk about the death of your husband. In any case, although you have thought quite a lot about Terry lately, it has not occurred to you that there may be any connection between his death and your current illness. In fact your symptoms can be explained in terms of depression, and your depression probably relates to your bereavement. However, you are visiting the doctor to ask about the tiredness - which you are so far assuming is due to a physical illness.

**General points**
It is likely that some - even perhaps most - of the ‘doctors’ will not elicit much of the information given above. Do not feel that you should have discussed it all by the end of the interview.

It is quite possible that some of them will ask questions whose answers are not given in the above ‘script’. If so, please improvise an answer; however, if you do this, please try to remember what you said, jot it down, and give the same answer if another ‘doctor’ asks the same thing.
APPENDIX F: Course contents (1)

Counselling Skills Course

The course took place over two afternoons, seven days apart. Each session lasted 3 hours including a tea break. Questions and informal discussion were encouraged throughout. Participant involvement was also ensured through small group exercises. The content of the course was based on Lloyd and Bor (1996).

Session 1

Group discussion: The importance of communication skills.

Beginnings: Greeting the participant.
Tutor/participant demonstration showing good and bad examples.

Questioning: Open ended questions, closed questions, leading questions.
Tutor input followed by group discussion.

Tea Break

Empathic responses: Tutor input.
Tutor/participant demonstration of good and bad examples.
Group discussion.

Role plays to practice skills discussed in session 1. Participants working in groups of 3; one participant playing the doctor, one the patient, the third observing, followed by discussion within the group and repeat of role play with roles exchanged. Tutor visiting each group of three to discuss, followed by feedback from each group to whole group.

Session 2

Recap of first session; questions from the group.

Empathy: Extended discussion.

Summarising: Tutor/participant demonstration.

Role plays: Incorporating all skills discussed, followed by feedback to whole group.

Tea break.

Immediacy.
Challenging.

Role plays in which the participant playing the patient was given a challenging comment to bring into the interaction at an appropriate moment. Whole group discussion of how doctors responded and how these responses could be improved.

Time allowed for participants to ask questions on the research project, and finally to fill in Consumer Satisfaction Questionnaire (Appendix K).
APPENDIX G: Course contents (2)

Psychodynamic Course

The course took place over two afternoons, seven days apart. Each session lasted 3 hours including a tea break. Questions and informal discussion were encouraged throughout. Participants' involvement was also ensured through small group exercises.

Session 1

General introduction

A model of the mind: brief introduction to psychoanalytical model and the notion of mental conflict.

The therapist - patient relationship: Tutor input with questions and group discussion on essential features of a therapeutic relationship.

Unconscious communication: brief introduction.

Tea break.

Unconscious communication: whole group discussion including exercise in which participants generated everyday examples of unconscious communication.

Projection: Tutor input and discussion.

Session 2

Unconscious communication: whole group exercise in which fragments of doctor - patient interactions put on overhead projector and group looked for covert content. (example on following page).

Transference: Tutor input using foregoing examples as basis.

Tea break.

Small group exercise: in groups of 3, participants studied separate examples of doctor - patient interactions and discussed them using given questions as a guide.

Role plays: Groups were asked to role play the interaction they had been discussing, generating possible ways of responding to the patient on the basis of their understanding of the overt and covert content of the communication.

Countertransference: Tutor input using foregoing examples as basis.
Time allowed for questions on the research project, and finally to fill in the Consumer Satisfaction Questionnaire (Appendix K.).
APPENDIX H: Patient’s Problem Questionnaire

Participant no: 
Date: 
Patient: 

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Research Project 1996-97: Enhancing Communication Skills and Psychological Understanding of Patients

Questionnaire for participants after seeing 'patient'

Based on the 'consultation' you have just had, please answer the following questions about the 'patient' whom you interviewed.

1. What do you see as the patient's main problem(s)?
   a) ........................................................................................................................................................................................
   b) ........................................................................................................................................................................................
   c) ........................................................................................................................................................................................

2. What were the main causes of the problem(s)?
   a) ........................................................................................................................................................................................
   b) ........................................................................................................................................................................................
   c) ........................................................................................................................................................................................
APPENDIX I: Attitudes to patients questionnaire

Participant no:......................
Date :...............................
Patient no:..........................

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Questionnaire B for participants after seeing 'patient'

Imagine yourself working as a general practitioner in the same health centre where you have just seen a 'patient' (i.e. the role-play). The following are brief descriptions of four patients who come to see you in this setting. Please read the descriptions given and then answer the questions below each one. The questions should be answered by circling one number on the scale, where 1 is the lowest rating and 5 the highest.

Richard is a solicitor who has been complaining of persistent stomach pains. During his consultation with you he seems impatient with some of your questions and almost snaps at you as he answers them.

How happy would you be to treat this patient?
Not at all 1 2 3 4 Very much 5

How much would you enjoy working with this patient?
Not at all 1 2 3 4 Very much 5

Elizabeth is a primary school teacher. You last saw her nearly a year ago about her sinus pains. She now tells you that she has been having earaches and wonders if it there may be a connection with the sinus problems.

How happy would you be to treat this patient?
Not at all 1 2 3 4 Very much 5
How much would you enjoy working with this patient?
Not at all 2 3 4 Very much 5

Martin runs his own small business. He has come to see you about persistent headaches. Unfortunately he reminds you of a relative of yours with whom you do not get on very well, and while you are talking with him your relative constantly comes to mind.

How happy would you be to treat this patient?
Not at all 2 3 4 Very much 5

How much would you enjoy working with this patient?
Not at all 2 3 4 Very much 5

Susan is a shop assistant. She has been to see you a number of times for advice for problems which don’t seem very serious. You feel that she likes coming to see you but you wonder whether any of your advice is actually being followed between appointments.

How happy would you be to treat this patient?
Not at all 2 3 4 Very much 5

How much would you enjoy working with this patient?
Not at all 2 3 4 Very much 5
APPENDIX J: Actor/actress questionnaire

Participant no: ....................
Actress no: ....................... 
Date code: ....................... 

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Questionnaire for actress to answer after seeing each ‘doctor’

Based on the ‘consultation’ you have just had, please answer the following questions about the ‘doctor’ who interviewed you. Please circle one number under each question.

How much did the doctor understand you and your problems?

Not at all  Slightly  Somewhat  Moderately  Very
1          2       3         4          5

How receptive was the doctor to the things you had to say?

Not at all  Slightly  Somewhat  Moderately  Very
1          2       3         4          5

How much did you feel you had to hold things back?

Not at all  Slightly  Somewhat  Moderately  Very
1          2       3         4          5

Did you have confidence in the doctor?

Not at all  Slightly  Somewhat  Moderately  Very
1          2       3         4          5

Overall, how good were this doctor’s communication skills?

Not at all  Slightly  Somewhat  Moderately  Very
1          2       3         4          5
APPENDIX K: Consumer Satisfaction Questionnaire

University College London

Research Project 1996-97: Enhancing Communication Skills and Psychological Understanding of Patients

Please help us to evaluate the communication skills course by answering the following questions. We are interested in your opinions, both positive and negative. You do not have to put your name on this sheet.
PLEASE CIRCLE ONE NUMBER FOR EACH QUESTION

1. How would you rate the quality of the course you attended?

   4 3 2 1
   Excellent Good Fair Poor

2. Did you get the kind of course you wanted?

   1 2 3 4
   No, definitely not No, not really Yes, generally Yes, definitely

3. Would you recommend the course to a colleague?

   1 2 3 4
   No, definitely not No, I don’t think so Yes, I think so Yes, definitely

4. Do you think the course will help you in dealing more effectively with patients?

   4 3 2 1
   Yes, a great deal Yes, somewhat No, not really No, it has made things worse

5. In an overall, general sense, how satisfied were you with the course?

   4 3 2 1
   Very satisfied Mostly satisfied Indifferent or mildly satisfied Quite dissatisfied

What were the best things about the course?

What would you like to see changed about the course?

Do you have any other comments about the course? (Continue on reverse if necessary)

Thank you for filling in this questionnaire
APPENDIX L: Communication Skills Rating

University College London
Research Project, 1996-97: Enhancing Communication Skills and Psychological Understanding of Patients

Communication Skills Rating

For questions 1 to 5, please use the following scale:

1. Not at all
2. Slightly
3. Somewhat
4. Moderately
5. Very much

1. How much did the doctor **attend** to the patient - that is, paid attention to and responded to what the patient said?

   1  2  3  4  5

2. How much was the doctor **empathic** - that is, tuned in to what the patient was saying, understood her feelings, and responded sensitively?

   1  2  3  4  5

3. How much did the doctor **understand the feelings behind** the patient’s manifest problems?

   1  2  3  4  5

4. To what extent did the doctor use a **doctor-centred** style of communication - that is, ask closed questions, make suggestions, follow his/her own agenda?

   1  2  3  4  5

5. To what extent did the doctor use a **patient-centred** style of communication - that is, use open questions, explore the patient’s feelings, follow the patient’s agenda?

   1  2  3  4  5
6. Overall, how **good** or **bad** were the doctor’s communication skills?

1. Extremely bad
2. Very bad
3. Moderately bad
4. Slightly bad

5. Neither bad nor good

6. Slightly good
7. Moderately good
8. Very good
9. Extremely good