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# Examining the research-practice gap in the therapy professions

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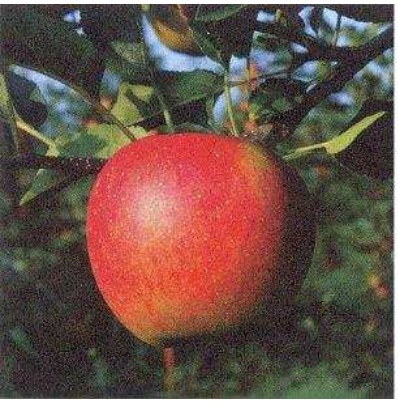


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**Aim:** The overall aim of the study is the exploration of the relationship between research and practice in the therapy professions – Occupational Therapy, Physiotherapy and Speech And language Therapy.

**Objectives**:
To identify what influences therapist's everyday practice
To establish what impact research has on therapist's everyday practice
To identify the factors which influence therapist's attitudes towards research
To establish whether there are differences between the three professions regarding their use of research.

## *Summary*

This report provides both a descriptive and analytical account of how occupational therapists, physiotherapists and speech & language therapists use research findings in their work. Occupational therapy, physiotherapy and speech & language therapy came to prominence during the two world wars. They have grown steadily in response to the needs of an ageing population, the limitations of medicine to assist those with chronic and degenerative disease and the current popularity of community care policy. These occupations are undergoing a process of professionalisation in an attempt to improve both their professional status and autonomy from medical control, the development of a knowledge base through research is a key strategy in achieving these aims (Friedson 1971, Eraut 1994). Thus initiatives at a professional level to promote research within the therapy professions have coincided with recent policy directives aimed at creating an evidence based health service (DOH 1991) resulting in both professional and policy agendas encouraging professionals to adopt an 'evidence based' approach. Although the topic of research and practice has become more prominent following the publication of Research for Health (1991) empirical research has focussed primarily on the medical profession. This study aims to explore the use therapists make of research in their every day practice.

**Method**

The study was located in the NHS South Thames Region and used qualitative and quantitative methods. The interview data provided the basis for understanding the processes underlying therapist's attitudes towards research and their use of research findings. The survey data enabled standardised measurement across all respondents. Interviews were carried out between February and March 1998. Eighteen in-depth interviews were arranged with therapists working in a range of clinical settings with varied experience, representative of the three occupations. Using the data from the interviews a postal questionnaire was designed and sent to a representative random sample of therapists working in the region (n = 1230) Pilot work began in June 1998, the final questionnaires were returned in October 1998. The overall response rate to the questionnaire with a follow up reminder was 70%. The response rate by occupational group was physiotherapy 63%, occupational therapy 73% and speech & language therapy 83%.

**Findings**

*Therapist's attitudes to research* - The majority of therapists had a positive attitude to therapy research and evidence based practice. 83% of all therapists agreed that therapy should be evidence based. This overall positive attitude towards research is in line with other recent studies (Upton 1999, Closs & Lewin 1998). There were some differences between the groups with occupational therapists less positive than their therapy colleagues. Just over half those surveyed (58%) felt that there was sufficient research to support their practice the largest proportion of these were speech therapists (33%) followed by physiotherapists (19%). Only 12% of occupational therapists believed there was sufficient research to support their practice. Therapists use of research followed a similar pattern with just over half confident in using research findings (54%), the largest proportion of these were physiotherapists followed by speech therapists, occupational therapists were least confident of the three groups. There appears to be a link between the amount of therapy research available to therapists, their overall attitude to research and their confidence in using research findings.

Research and everyday practice - Despite a positive attitude to research a minority of therapists believe research to be an important influence on their everyday practice. Only 16% of therapists felt research findings were very influential taken in the context of a range of other factors which influence their everyday practice. Out of the three occupations physiotherapists made up the greater proportion of these. Clinical experience in comparison was rated by 85% as very influential on everyday practice. Clinical guidelines and protocols

were rated by 55% as very influential – (It is assumed that few guidelines at present are research based, Thomas et al 1996).

Changes in Practice. Research appears to play a more significant role in therapists changing aspects of their practice. 69% of therapists had experimented with a new treatment in the past six months. Fewer, 15% had stopped a treatment. When experimenting with a new approach and stopping an aspect of treatment, research and professional reading was rated as an influential factor more frequently than was the case in everyday practice. The interview and survey data together provides some insight into how research may come to influence decisions to experiment with or stop treatment. In the interviews therapists reported that making a change would be a considered process involving a range of factors. Research alone would not prompt a change in practice. However attending a short course backed up with research together with support from colleagues may prompt a change - 88% of all therapists had attended one or more short courses in the previous six months. 68% of these courses had included some reference to research. Research may also be used as a means of adding authority to a decision by a therapist to withdraw treatment. As one physiotherapist commented when withdrawing a service from an acute ward. " We could say to them, we are not doing this anymore and here is the research to prove it." Pt,1.

Research and the professions - Regardless of whether therapists used research in relation to their individual practice the majority believed research was good for the status and continued survival of the profession as a whole. Therapists talked about the importance of validating their practice in order to demonstrate how effective it was to purchasers and other health professions. Many therapists felt that therapy services were under threat. Therapists saw research that backed up therapy practice and proved its efficacy as ammunition in a competitive health care environment.

**Conclusion**

The study supports a view of individual clinical experience being the cornerstone of therapy practice. Research plays a role in discreet areas of individual professional practice, specifically when therapists consider making changes in practice. Research findings carry more weight when presented within a professional learning context, for example through short courses. Developing a research knowledge base is perceived by the majority of therapists as being central to the wider profession's development and survival. The findings from the study suggest that far from threatening the autonomy of professional practice the implementation of evidence based policy is viewed opportunistically by therapists and their professional bodies. There is also evidence to suggest that individual therapists who do use research select and shape the findings to fit their own agenda. Research was used in a variety of ways within a clinical setting to 'back up' practice within the team, to confirm personal 'hunches', to support new developments or justify the withdrawal of services. These findings challenge the mechanistic view of research as a purely scientific object (Gray ,1997) and suggests that research is also a powerful social tool which therapists are learning to use to maintain their clinical autonomy and ensure their survival.

# 1. Background

## *1.1 Policy*

Health services research policy changed following the creation of the R&D strategy in 1991. Prior to this, for a range of historical reasons, research had been conducted on an ad hoc basis with little overall co-ordination of effort. The findings of the House of Lords Select Committee on Science and Technology in 1989 highlighted similar problems to those identified by Rothschild (1971) some 20 years earlier. Principally that research was biased towards high-tech medicine, that there was an imbalance between applied and basic research and that professionals had too much influence in setting priorities. The changes that occurred in 1991 which addressed these imbalances reflect the wider context of the market reforms (DOH 1989) - the ideology of competition, the emphasis placed on cost effectiveness and the aim of making the needs of the service a priority above professional interests.

The health service has always had to balance demand against limited resources (Ham 1995). In the current climate where costly new treatments and the effects of an ageing population have added new momentum to the need to find a solution to the problem of funding, one aim of the R&D strategy has been to identify effective and ineffective treatments. With the rationale of weeding out ineffective practice to leave resources for effective practice, limiting access to health care on the grounds of science is regarded as a more acceptable form of rationing than using cost grounds alone. (Baker, 1994). A further aim has been to set up an infrastructure within the service in order to enable practitioners to make use of research findings for example The Cochrane Collaboration established in 1992 and the NHS Centre for Reviews and Dissemination.

The adoption of the 'ideology' of Evidence Based Medicine (EBM) has been an integral part of the process of achieving the stated goal of an 'evidence based service' (DOH 1991). Despite the fact that EBM emanated from the medical profession and the considerable resources that have been deployed in promoting its use (Sackett 1997). Some factions within the medical profession, other health professions and policy analysts remain sceptical of its ability to improve medical practice or provide a long standing economic solution for the NHS (Grahame-Smith 1995, Clemence 1998, Harrison 1997 ).

Although few argue with the need to prevent doctors from carrying out ineffective treatments some see the widespread use of clinical guidelines and protocols advocated by the proponents of EBM as challenging professional judgement and threatening the autonomy of doctors (McKee, Clarke 1995). Initially focussed on changing the behaviour of doctors, EBM has broadened to include all health professionals under the banner of evidence based practice. There are factors that distinguish the therapy professions, the subjects of this study from medicine, and it is these factors that have so far limited the widespread application of guidelines and protocols to this group of health professionals (Thomas et al 1996). Research within these occupations is not well established and a large proportion of therapy practice is carried out in what is termed the 'grey zone' of health care (Naylor 1995).

## *1.2 Professional background*

In 1994 (DOH 1994) the therapy professions, occupational therapy, physiotherapy, and speech & language therapy published a position statement, responding to Research for Health (DOH 1991) which welcomed the creation of the strategy. In theory, the strategy opened up new opportunities with mainstream funding for therapy research, at a time when research was becoming an important aspect of the profession's development. Occupational therapy and physiotherapy have traditionally been organised under medical control, an arrangement formalised under the PSM Act 1960. Speech & language therapists remained outside the act trading state regulation for increased autonomy. All three groups have wanted to alter the long

held perception of their image as "An homogenous group..there to assist the doctor"(Cope Report 1951) and to establish their autonomy and independence from medicine. Such moves might be interpreted as part of a process of professionalisation (Friedson 1971).

The fact that the Professions Supplementary to Medicine Act is currently under review may be an indication that these occupations are building on their professional status and autonomy (Craik 1997). These developments have been influenced by the recent opportunities and challenges created by the reforms of health service (DOH 1989) and changes within higher education (Salter, Tapper 1994). The market reforms (1989-1997) have assisted in highlighting the importance of a research knowledge base to the professions. The ideology of evidence based practice has been widely promoted at the level of the professional associations. The professional bodies see therapy research as a vital means of validating therapy practice and demonstrating its effectiveness in a competitive health care market. Changes in professional training specifically the move towards a degree based profession has resulted in closer links between the old training colleges and the universities facilitating the development of an academic branch of the profession. Anticipated legislative changes, demanding that therapists up date their skills and the wider demands for professionals to be accountable to the public have acted as a further spur to the promotion of the profession as research based (Harrison, Pollitt 1994). The importance attached to R&D within the therapy occupations is evident in the appointment within all three associations of senior heads of research within their administrative structures in the last five years. Currently little is known about the reaction of the bulk of the membership of these groups to these changes that are occurring at the macro level.

### *1.3 Research – Practice Gap*

Both policy and professional factors are therefore contributing to the drive to establish a culture of research and evidence based practice within the health service generally and more specifically, within the therapy professions. However it is widely acknowledged that research findings " even solid findings that have clear implications for practice, are reflected belatedly, and sometimes not at all in the behaviour of many health care professionals." ( Haines, Jones 1994). There is a growing literature on the 'gap' between research and practice, as changing practitioner behaviour is seen as the biggest impediment to achieving an evidence based service. Dowie (1994) has suggested there are three explanations as to why the 'gap' exists. Firstly, that it is a problem of dissemination. Practitioners don't have access to or read research findings or if they do read them they don't understand them. Secondly, that practitioners remain unconvinced about the findings of research which may conflict with their own clinical experience, and thirdly that there is a cognitive mis- match between researchers and therapists perspectives. Research being truth and knowledge driven and practice demanding that clinical judgement is applied in situations of uncertainty. The aim of this study is to explore the relationship between research and practice within the therapy occupations within the context of the current policy and professional climate outlined above. The focus of the study is on finding out the attitudes of therapists towards research, and whether research has any influence on their everyday practice.

# 2. Methodology

## 2.1 Choice of methods

The lack of previous research in this area necessitated the use of qualitative methods initially in order to develop the research question. Eighteen in depth interviews were carried out with therapists working in a range of clinical settings with varied clinical experience, and representative of the three groups. Using the data from stage one a postal questionnaire was designed and sent to a representative sample of therapists working in the South Thames Region. (n=1230). The combination of qualitative and quantitative data provides a comprehensive picture of research in relation to the everyday practice of therapists working in the NHS. The interview data informed explanations of the processes underlying the use of research by therapists and their attitudes towards research. The survey data enabled standardised measurement across all respondents so that the responses of different groups, specifically the separate occupations, can be analysed on a comparative basis and conclusions drawn about the whole population.

## 2.2 Modifications to the original methods

The intention was to carry out follow up interviews with a sub sample of respondents in order to explore differences between those therapists strongly influenced by research and those less so. It has been decided to postpone further data collection at present in order to establish whether the interview and survey data, is sufficient to provide a robust explanation as to why some therapists are more research orientated than others. The overall response rate (70%) to the questionnaire, over sixty items together with the interviews has provided a rich database requiring further analysis.

## 2.3 Exploratory stage

The first stage of the project involved carrying out in-depth interviews with therapists from all three disciplines. Three separate trust sites were used, a London teaching hospital, a community trust and an acute trust located within the South Thames Region. Therapists were chosen to represent as wide a range of clinical experience as possible. The interviews took place between February and March 1998 at the three Trust sites. In total 18 interviews were carried out at the clinical base of each therapist, providing the opportunity to view the everyday working environment of the therapists. Interviews lasted from between ¾ to 1 hour. All the interviews were taped and transcribed saved onto disc and then loaded onto Atlas/ti for Windows. Codes were assigned to passages within the text and these codes were used to assist in the development of the conceptual framework. Therapists were encouraged to talk in depth about their practice and to elaborate on their role and individual approach to practice

## 2.4 The conceptual framework

Following the initial analysis of the interview data an earlier version of the conceptual framework was developed. and the key concepts defined. The concepts were then operationalised ( de Vaus 1985). The questions in the survey were developed from the interview data and were designed to tap the key concepts in the framework. (Appendix 2)

## 2.5 Questionnaire design

The questionnaire went through several stages of revision prior to piloting and then further revision following the return of the pilot questionnaires. Informal piloting of the question format was conducted at the researchers former workplace through discussion with therapy colleagues. Colleagues within the Centre for Health Services Studies also offered useful advice regarding the phrasing and layout of the questionnaire. The choice of therapists for the pilot was made from the existing sampling frame, which was at this time two thirds complete. The pilot questionnaire (16) were sent out in the middle of June 1998. All the pilot questionnaires were returned completed following one follow up telephone call

## 2.6 Postal Survey

There is no published list of therapists working in the South Thames Region and a sampling frame needed to be constructed in order to identify therapists for the survey. The South Thames Region Handbook was consulted and a fax sent to all Trust in the South Thames Region. The fax was addressed to the personnel department of each Trust requesting a contact name and address for the therapy manager responsible for each discipline. A brief explanation of the research was provided. At the time of compiling the sample frame in May 1998 major reorganisations of some of the Trusts were occurring. Some of the Trusts had merged affecting the ability of some of the personnel departments to identify the therapy managers. A second and third follow up, fax and telephone call was used to increase the response rate at this stage.

The second stage involved writing a more detailed letter to each individual therapy manager, they were asked to provide a list of all therapists working in the Trust with a brief description of speciality, contact address and telephone number, gender and whether they were part time or full time. A follow up telephone call and a follow up letter were made to increase the response rate. The sampling frame was closed on the 10th July 1998 in order to prepare the sample. At the time of closing the sampling frame 98 out of a possible 126 therapy managers had responded. The information from the therapy managers was received during the months of June and early July 1998. An Excel file was created and data entered in random order of replies received. Total numbers of therapists identified were 2460. The sampling frame was sorted into the three separate disciplines. A final 1 in 2 random sample was drawn from the total number resulting in a final sample size of 1230 therapists.

## 2.7 Response rate

The questionnaires were mailed out during the week of the 20th July 1998. Therapists were asked to return the questionnaires by the 14th August 1998 or as soon as possible thereafter. One post card follow up reminder and a second follow up with a questionnaire was sent out resulting in a final response rate of 70% - Response rate by occupational group: physiotherapy 63%, occupational therapy 73% and speech & language therapy 83%. (Appendix 1)

## 2.8 Analysis

Data was analysed using SPSS for Windows. Initial analysis focussed on questions relating to everyday practice, changes in therapy practice and therapist's attitudes to research. Further statistical analysis will be presented in the PhD thesis to be submitted later this year (1999).

# 3. Findings Part 1 – Interview data

## *3.1 Introduction*

Harrison (1994) has suggested that one of the problems associated with getting 'research into practice' is the lack of knowledge of what the day to day work of different professionals entails. The main focus of the interviews has been on obtaining descriptions of therapist's practice in order to understand the role research occupies, if any in an everyday context. The interviews were semi-structured. Questions were asked initially about practice rather than specific questions about research in order to see whether therapists mentioned research spontaneously in relation to their practice. At the end of the interview therapists were asked more directly about their views on research and its relevance to their practice. Themes emerging from the data are described below. The themes are organised into three matrixes (1) structural/organisational factors (2) patient factors (3) professional factors. And (4) therapists views about research. The data is presented in the accompanying matrixes, a form of data presentation suggested by Miles, Huberman, (1984.)

**Structural factors** – Factors such as managing time, carrying a large case load, changes in staffing levels, resource issues and management objectives made up therapists everyday working environment. These factors affected what therapists felt was achievable, what assumed priority and what had to be 'cut out'. (Matrix 1)

**Patient factors** - Therapists individual perceptions of patients varied. Some felt that patients were more questioning, more likely to complain and had high expectations. Other therapists felt that the 'ideology of consumerism' was a myth and that patients were still largely passive. (Matrix 2)

**Professional factors** – These factors covered all aspects of therapy practice including the influences from training, past experience, colleagues, courses and research. (Matrix 3)

**Therapists views on research** – Some therapists were more research orientated than others. All therapists agreed that research was important to the status of the profession and that more should be done to establish what worked and did not work in therapy practice. (Matrix 4)

***(1) 'Structural factors' matrix – Some of the factors that made up the therapists working environment are described within the matrix below. These factors affected what therapists felt was achievable, what assumed priority and what had to be 'cut out'. Therapists had to balance these structural demands against those of their patients and carers (matrix 2) and their own need for professional development.(matrix 3)***

| ***Managing time*** | ***Waiting lists/caseload*** | ***Staffing issues*** | ***Resources*** | ***Management objectives*** |
|---|---|---|---|---|
| You set aside the time to do things and the time just disappears because the phone rings and a patient says 'can I turn up?' Slt,18 | We have so few staff a waiting list would just put extra pressure on us it would generate extra paper work and queries from patients..Ot2 | When my colleague retired they didn't have anyone for two years it was mind boggling it was such a large area to cover single handed. Pt,15 | social services are supposed to refund us but they don't so we are always short of equipment. Ot,14 | If you give them the figures (activity returns) then they leave you alone, if we overachieve I leave out the extras. Pt,10 |
| If its urgent, like a chest infection that takes priority over everything else. Pt,11 | We have a waiting list of 19-20 weeks but we do try to see the acute problems sooner. Pt,7 | Having another physio means I can delegate, it means I have time to do other things. Pt,22 | We need more physios but we haven't got the figures to show them the numbers we are covering and why we need more staff. Pt,9 | GP's pay for the service so we have to provide an account of what we do to them. Slt,19 |
| People are bogged down on a day to day basis where does research fit into that? Ot2 | As w/lists have increased we've had to be very specific about what we can and cannot offer. Slt,19 | I have some young staff now who are really keen to go forwards. Pt 12 | All I hear is cuts,cuts cuts as far as physio goes we don't get enough for continuing education. Pt,17 | The pressure is there in hospital to get the patient in and out as quickly as possible. Ot,20 |

***(2) Patient factor matrix - Therapists individual perceptions of patients varied, some felt that patient's were more questioning, were more likely to complain and had high expectations. Other therapists felt that the ideology of 'consumerism' was a myth and that patients were still largely passive. No clear pattern emerged from the interviews linking views to clinical setting, discipline or level of experience. Therapy roles differed in the medically orientated acute setting as compared with the 'greyzones' of practice in the community. Individual factors influenced where therapists chose to work.***

| ***Treating the individual patient*** | ***Clear clinical problem*** | ***Complaining*** | ***'Consumers'*** | ***Questioning*** | ***Patient involvement*** |
|---|---|---|---|---|---|
| Although you might have a general set of exercises You have to do a lot of trimming the treatment to the individual. Slt,18 Acute | If I'm treating say a shoulder I will go and look up shoulder articles. Pt,17 Acute | Litigation is much more common now you have to be careful and everything needs to be well documented it means a lot of paper work. Ot,2Com | People are now more clearly perceived as consumers than patients and along with that has come a change in our attitude to them. Ot,2,Com | Patients do question what you are doing but nobody has asked for evidence that' it works'. Ot6 Acute | It is very important to listen to what the patient says work and what doesn't work for them personally. Ot,21 Acute |
| I deal with the elderly patient and then spend half an hour with the daughter who is at her wits end it's part of your everyday. Pt13Com | I have a client with 'downs' she is in her fifties but elderly her mobility has deteriorated and a couple of years ago she had a fracture. Pt,22Com | Patients don't want 'evidence based' they want someone to sit and admire the photographs that is often the patients perception. Pt,10 Com | You don't get consumer demand, patients are happy to get anything they can as long as you take the pain away. Pt,1 Acute | Patients never question what you are doing they have an implicit belief that if you have a uniform on you know what you are doing. Pt,1,acute | Some patients would let you do anything you could try something out Slt,18 Acute |
| ***Informal support of relatives*** | ***Complex problems*** | ***Lower expectations*** | ***'patients'*** | ***Accepting*** | ***Passive patient*** |

***(3) 'Professional factor' matrix - These factors covered all aspects of therapist's current practice and the influences on it from past experience and training, colleagues, courses, and research. There was agreement that positive changes were occurring within the profession, often ascribed to the introduction of degrees. It was felt that therapists were becoming more questioning about their practice. The importance of being able to 'validate' practice through research was stressed without research backing it was thought therapy services might be threatened.***

| | | | | |
|---|---|---|---|---|
| ***Professional training/ Autonomy*** | Students now are more questioning, more challenging and more research biased. Pt1 | If you have research it makes your profession stronger and more autonomous. Pt 17 | I think a degree just gives you that little bit more recognition, especially with the consultants and medical staff. Pt7. | As a profession I think we feel that some of the basis of what we do is missing its not evidence based..Ot,6 |
| ***Evidence based practice/ Research*** | I suggested a certain splint and I had the research to back up the choice so the physio went along with it. Ot6 | We are questioning about what works and what doesn't work, if its not working why should we do it? Pt,17 | I would be interested in findings but I wouldn't change my practice immediately. Ot,21 | A lot of physio research is trying to validate the services we currently provide. Pt,17 |
| ***Continuing Professional Development*** | Most people here keep up to date through courses, its recommended by the college even though there's no money. Pt 7 | Most courses are irrelevant to me, that not saying they are irrelevant just that I don't need them at the moment. Pt 11 | I've been on a course and looked at how the treatment concept has changed and found I could adapt my practice Ot,6 | There will be a legal requirement for CPD and people are aware of that now. Ot2 |
| ***Peer influences*** | Physio's quite competitive...you feel you need to keep up with what's going on. Pt22 | My supervisor has passed techniques on to me that I would be willing to try now. Slt,23 | Getting colleagues views on different things is good it makes you think on your feet.Ot,20 | We are lucky that we have support here I would dread not being able to sound out my ideas with someone. Slt,3 |
| ***Experience*** | Because I have been here some time I am held in high esteem, if I make a suggestion on a ward round it is usually taken up. Pt9 | The 'comfort zone' is what you are happy with ..what works based on your own experience. Ot,21 | you shouldn't try something out on a patient if you haven't the confidence or expertise. Slt18 | I think initially you draw on your training, four years on I'm drawing more from my practical experience. Pt7 |

***(4) Therapist's views on research – A range of views were expressed. Some therapists appeared to be research orientated, mentioning that they had read articles relating to their various aspects of their practice, others felt that research was remote from their practice describing themselves as more 'hands on' and practical rather than academic. All agreed however that research was important to the status of the profession and that more should be done to establish what worked and what didn't work within therapy.***

| | | |
|---|---|---|
| ***Not enough*** | We talk about evidence based practice but in our profession there is just a great hiatus where there is nothing, no research. Pt,1,Acute | A lot of my work is instinctive but at the same time it can and should be measured, the problem is at the moment we don't know how to measure what we do. Slt,5,Com |
| ***Research & change*** | we used to 'clap' people all the time well research has shown its ineffective in many cases so we don't now. Pt,1,Acute. | I would be interested in findings but I wouldn't get anxious about changing things I would talk to others first, maybe go o a course.. Ot,21,Acute |
| ***Caution about findings*** | Psychologists had done some research into S&LT but they hadn't bothered to involve therapists. .there was already work in that area it makes you sceptical. Slt,5,Com | It is very difficult to equate what you are doing with pie charts or whatever, that is not to say that controlled trials aren't useful. Pt,11,Com |
| ***Professional status/ 'Back up'*** | Research is there to prove to ..It's a way of keeping up with the other professions. Ot,20,Com | It would have been hard to persuade the purchasers if I hadn't been able to say look this is what other hospitals are doing this is some of the research and these are the outcomes.Pt,9 Acute. |
| ***Confirming practice*** | Sometimes what I am reading is confirmation that I'm heading down the right track. It gives me something to hang my experience on. Ot,6 Acute | We do things often because it 'might' make a difference, I may do a little trial with my patients.. to see if it does make a difference or not if I read something that suggests it doesn't work. Pt,1 Acute |
| ***Resistance*** | People are reluctant with new ideas, they will see research as another thing they 'have to do' another piece of paper to fill in. Pt1, Acute. | I have a colleague who has come into the community from doing 19 years on an orthopaedic ward , I'm damn sure research wont have crossed her mind. Pt,10 Com |

# 4. Findings Part 2 - Survey data

## *4.1 Introduction*

Frequency distributions and crosstabulations comparing the three occupational groups are presented below and provide an initial descriptive account of the data. Therapist's attitudes towards therapy research and evidence based practice are given together with therapists responses to questions about the influences on two aspects of therapy practice, 'everyday practice' and 'changes in practice'.

## *4.2 Influences on therapists 'everyday practice'*

Therapists were asked to rate various influences on their 'everyday practice'. The items selected covered the main aspects of the conceptual framework (Appendix 2) i.e. structural, patient, and professional factors. The majority of items were chosen to reflect the influences highlighted by therapists in the interviews. The results are presented for the sample as a whole and then broken down into occupational groups.

Overwhelmingly clinical experience is reported as being of most influential by 85% of all therapists. The constraints of managing a large case load (59%) and discussions with colleagues (58%) come second and third. Clinical guidelines and protocols are rated by 55% of therapists as influential, followed by listening to patients (46%). The influence of waiting lists rated as very influential by (25%) of all therapists. Educational factors including attendance on short courses (25%) professional reading (22%) and attending special interest groups (17%) follow. Purchaser's demands are rated by (16%) as very influential as is familiarity with research findings (16%). The influences of patient complaints, (15%) and a new team member (13%) are rated low. The introduction of a new product is rated by only 2% of therapists as very influential. (fig 4)

Fig. 5,6,7 illustrates the similarities and differences between the three groups. All three groups share a similar profile with clinical experience rated as the most influential factor. Caseloads, discussions with colleagues, guidelines and listening to patients made up the top five influences for all three occupations. There were some differences between the groups.
In Fig 5, physiotherapists rate familiarity with research findings (22%) as more important than the other two groups. The influence of research findings for occupational therapists (10%) was similar to speech therapists (11%) low in comparison to physiotherapy (22%)
Fig 6, illustrates that occupational therapists were more influenced by the demands of purchaser's (20%) than the other two groups. (PT 12% & S&LT 16%) Less emphasis was placed on the influence of short courses by occupational therapists (16%) in comparison to the other two groups (PT 31% & S&LT 27%). Fig 7, highlights that waiting lists are more of an issue for speech and language therapists (38%) than occupational therapists and physiotherapists (22%). Guidelines and protocols similarly are rated as more influential by speech and language therapists (60%) than occupational therapists (53%) and physiotherapists (54%).

## *4.3 Changing practice*

Therapists were asked, if they had changed their practice during the past six months and what factors had influenced them to change their practice. Two contrasting aspects of change are included in this analysis, 'experimenting with something new' and 'stopping a treatment'. 69% of all therapists said they had experimented with a new approach in comparison to only 15% who had stopped a treatment. Different factors affected each type of change. (fig 8,9)

### *Experimenting with a new approach to practice.*

Current practice, a category that included attending short courses, was the most influential factor cited by therapists when experimenting with a new approach (fig 8), particularly for physiotherapists (41%). Discussion with colleagues was rated as the second most influential factor for all groups with research and professional reading third for physiotherapists and speech & language therapists and fourth for occupational therapists. The position of research here contrasts with the factors rated as influential on 'everyday practice' (fig 4). A further difference is found between occupational groups, 8% of physiotherapists rated research as influential, resulting in them experimenting with a new approach compared to 26% of speech & language therapists. This contrasts with the picture found in everyday practice, where 22% of physiotherapists said they were influenced by research compared to 11% of speech therapists. The numbers of occupational therapists remains the same in both cases at 10%. Occupational therapists rated clinical experience as the third most influential factor. In contrast to the influences on everyday practice, patient and structural factors are less important when therapists experiment with a new approach. Although this is the case for all three professions occupational therapists rated patient factors and structural factors higher than their physiotherapy and speech therapy colleagues.

### *Stopping a treatment*

The total numbers of therapists from all three groups that had stopped a treatment in the last six months was small (fig 9) compared to the total sample (n = 126). No firm conclusions can be drawn, however it is interesting to note that stopping practice occurs less frequently than experimentation and to consider the variation between the two pictures especially in relation to the factors given as most influential. Prioritisation and organisational factors (Structural) play an important role in stopping an aspect of treatment, particularly so for occupational therapists. Speech and language therapists rated their own clinical experience as important above all other factors. Research, plays a more significant role in affecting decisions to stop treatment than in 'everyday practice' for all three groups but particularly so for physiotherapists.

## *4.4 Therapists attitudes to research*

Therapists were asked to give their opinions on a range of questions relating to therapy research. Responses from all therapists are given in the text, the charts illustrate more clearly the differences between the three occupations. (fig 1,2,3,)

**Should therapy be 'evidence based'?** Overall 83% of therapists agreed that therapy should be evidence based as (fig 1) illustrates occupational therapists were less positive towards or unsure about 'evidence based' practice in comparison to their physiotherapy or speech therapy colleagues.

**Is there enough therapy research?** 58% of all therapists agreed that there was insufficient 'therapy research' at present, and 33% were unsure. 33% of speech therapists felt there was sufficient research, compared to 19% of physiotherapists and only 12% of occupational therapists. (fig 2)

**Level of confidence in using research?**

Overall 54% of therapists said they were confident in relating research to their practice, of this group physiotherapists were the most confident (56%). 33% of therapists were unsure about their confidence in relating research to their practice (fig 3). It is possible that there is a link between the quantity of therapy research available to therapists and their overall attitude to research and confidence in using research findings. This provides a possible explanation as to why occupational therapists were less confident and less positive towards research than their colleagues.

# 5. Discussion

## *5.1 Research and 'everyday practice'*

The picture that emerges from both the interview and survey data is one of clinical experience forming the cornerstone of everyday therapy practice. Individual experience is augmented by the opinions of peers and more experienced colleagues. Research findings in comparison, to the other professional, structural and patient demands plays a marginal role in influencing the everyday practice of therapists. Such a picture suggests that the 'ideology' of evidence based practice - involving "a shift away from basing clinical decisions on opinion, past practice and precedent and towards making more use of science and research " (Walshe, 1995). Still has a long way to go if it is to challenge the traditional model of clinical practice as presented in the findings. Clinical guidelines that may be based on research findings have more influence than research findings alone and this would suggest the correctness of those who promote the widespread adoption of guidelines as the means for incorporating research findings into therapy practice. If the concept of creating an evidence based culture in the NHS is dated to the R&D strategy ( DOH 1991) then the fact that 16% of therapists did rate research as influential might give heart to those policy makers who believe evidence based practice to be the way forward for the NHS.

## *5.2 Changes in practice*

The interview data suggested that change is not something that occurs frequently or without reflection and deliberation by individual therapists. One therapist described the 'comfort zone' of practice consisting of expertise and confidence in applying techniques built up over time. Change may occur at the margins of this body of practice. The area of professional practice where research is influential is apparent in changes in practice specifically, experimenting with a new treatment or stopping treatment. The main influences on experimenting with something new is attendance on short courses and the second the influence of colleagues. In comparison to everyday practice, research and professional reading was given as the third factor in influencing change for physiotherapists and speech and language therapists and fourth, next to clinical experience for occupational therapists. Research findings possibly lend authority to 'hands on' course work. Change of this type, being initiated by therapists themselves, in pursuit say of individual clinical interests, is unlikely therefore to be challenging in comparison to changes that are imposed through organisational or departmental edicts. Findings from the survey and interview data suggest that therapists would not change practice readily as a result of reading research that was in conflict with their current practice.

Discontinuing a treatment is less common, practice built up over time is unlikely to be abandoned without a strong reason. Research is the third influence in this situation. The interview data provides some insight into the process where research findings may be used to justify therapists withdrawing services and convincing others of the decision. Research in this case is used to confirm something therapists already had a 'hunch ' about and to back up a decision they had already taken. Decisions about discontinuing treatment may also be imposed from within the organisation, the data indicates that structural factors are also influential.

## *5.3 Are some therapists more influenced by research than others?*

The majority of therapists in the survey agreed with the statement that therapy practice should be evidence based and believed that research was of positive benefit to the profession as a whole whether they themselves used research in relation to their individual practice or not. The data suggests that there are differences between therapists with some more research orientated and others less so. Even though some therapists are more research orientated they may be no more likely to change their practice in line with research findings than their

colleagues who do not use research as readily. There appears to be no connection between how research orientated individual therapists are and general attitudes regarding 'evidence based' practice.

Differences will be explored more fully using the survey data in the next stage of the analysis. One possibility is to explore whether there are distinct characteristics that therapists who are more research orientated share. Possible characteristics include the length of time since qualifying, clinical base, and occupational group. An explanation for these differences could be that therapists who are more recently qualified use research to promote confidence. The interview data established that there were differences in the roles and attitudes held towards research by acute and community therapists. It is possible that there is more research available to therapists working in the acute setting compared to that which could be applied in the 'grey zones' of community practice. Occupational therapists were the group least influenced by research compared to speech and language therapy and physiotherapists. A possible explanation lies in the lack of a research base to support occupational therapy practice. The survey data has also indicated that occupational therapists more than the other two groups are influenced by the structural factors associated with resources and purchasing

## *5.4 Differences between the occupations*

It was expected that there would be differences between the three occupational groups. These could be ascribed to the differences in timing of changes in basic training and the different theoretical models that underpin their practice. A picture emerges from the data of physiotherapists and speech therapists being more research orientated than their occupational therapy colleagues. Speech and Language therapists were more positive about the amount of research available to their profession, their confidence in applying research and its relevance to their everyday practice however research was not given as a significant influence on their 'everyday practice'. Physiotherapists depicted a more consistent picture being positive about the amount of research available to them, and level of confidence in using it. Occupational therapists were more consistently reserved regarding research, its availability, relevance and the extent of its influence on their practice.

## *5.5 Research practice gap*

Is there any evidence that factors highlighted by Dowie (1994) fit the picture that has emerged from the data? First, does the message get through? The majority of therapists said that they had read a research article in the past six months (79%), however they were less certain about their confidence in applying research to practice (fig 3). Secondly, is the message accepted? Speech & language therapists and physiotherapists were more positive about the relevance of research to their practice, occupational therapists less so. It is possible that therapists may be reading research that confirms what they already know as a consequence of therapy research being mainly focussed on validating current practice. Practice as Harrison (1994) has suggested may be ahead of research. The issue of a mis-match of perspectives is more complex. Some answers may be found in the exploration of the differences between therapists who are research orientated and those who are less so.

# 6. Conclusion

The study supports a view of individual clinical experience being the cornerstone of therapy practice augmented by the influences of experienced colleagues and peers. Research plays a role in discreet areas of individual professional practice, specifically when therapists consider making changes in their practice. Research findings carry more weight when presented within a professional learning context such as that found for example in short courses. Developing a research knowledge base is perceived by the majority of therapists as being central to the wider profession's development and survival. The findings from the study suggest that far from threatening the autonomy of professional practice the implementation of evidence based policy is viewed opportunistically by therapists and their professional bodies. There is also evidence to suggest that individual therapists who do use research select and shape the findings to fit their own agenda. Research was used in a variety of ways within a clinical setting to 'back up' practice within the team, to confirm personal 'hunches', to support new developments or justify the withdrawal of services. These findings challenge the mechanistic view of research purely as a scientific object (Gray ,1997). And suggests that research is also a powerful social tool which therapists are learning to use to maintain their clinical autonomy.

If the aim is to encourage the increased use of research findings by therapists the study has highlighted the following points. The first is the importance of commissioning research relevant to the everyday needs of therapists - particularly the work of those therapists working in community settings and the 'grey zones' of practice. There is a perception amongst therapists generally but occupational therapists particularly that there is insufficient research available to support their practice. Secondly, in terms of promoting the uptake of research, rather than introducing new dissemination routes, short courses and special interest groups provide a well-established and popular avenue. Therapists were more willing to accept research presented within this type of learning context where the opinions of other colleagues could be sought and where it may be possible to gain 'hands on' experience. Guidelines and protocols may also prove to be a successful route for disseminating research findings. Just over half of those surveyed said they consulted guidelines. Little is known about the origin, format or influence of guidelines on actual practice or the role of short courses within therapists continuing professional development. Further research should be commissioned to explore the role of both short courses and clinical guidelines in promoting the uptake of research findings.

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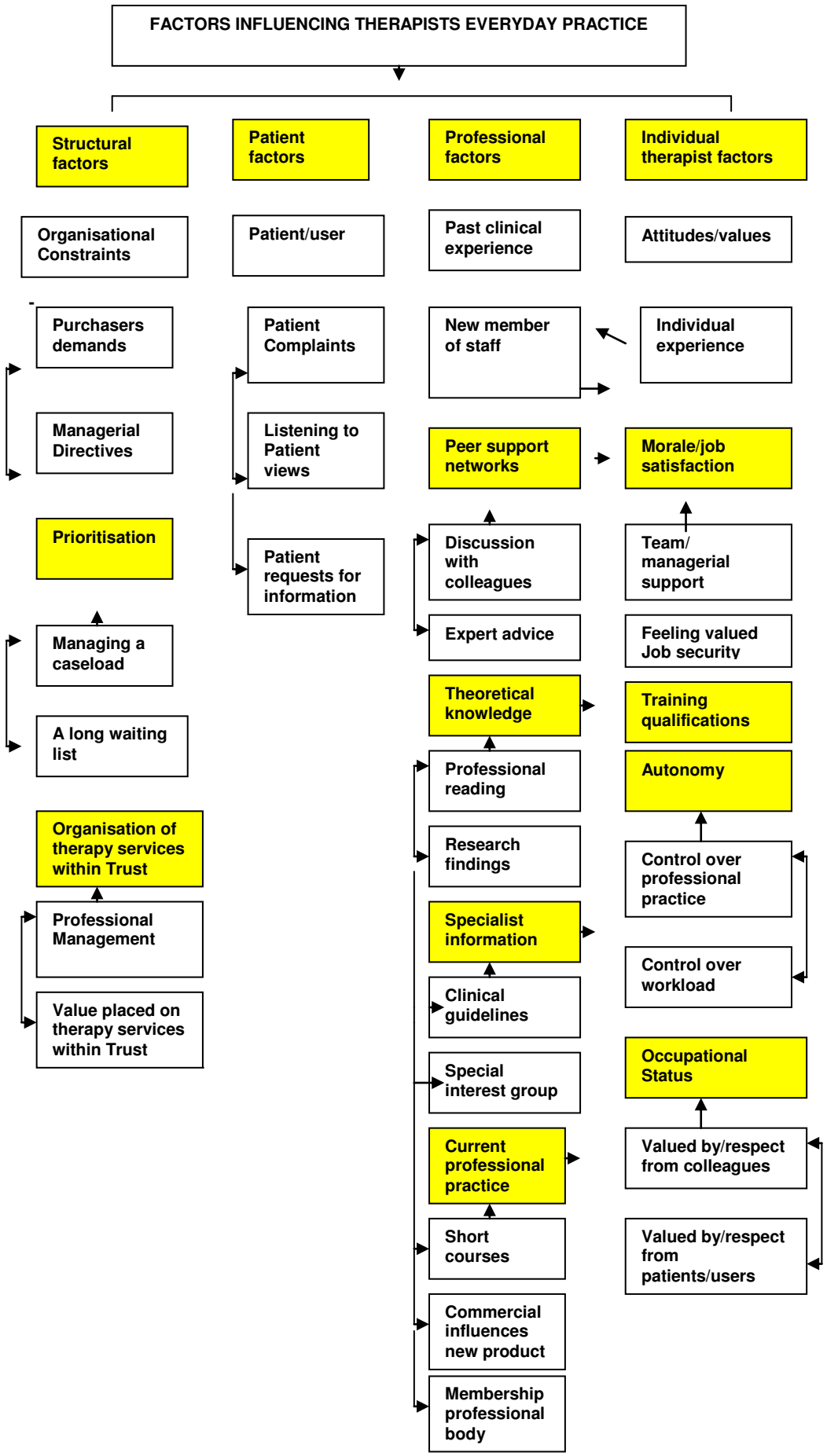
**Total population 2459 in South Thames Region**
**1 in 2 sample**

| | Physio | OT | S & LT |
|---|---|---|---|
| **Total sample with exclusions*** | **588** | **361** | **212** |
| **Total returned completed** | **368** | **264** | **176** |
| **% response rate** | **63%** | **73%** | **83%** |
| **Overall response rate 70%** | | | |

*Maternity leave, sick leave, retired, moved

**Appendix 1** **Details of sample**

**Appendix 2** **Conceptual Framework**




**Appendix 2** **Conceptual Framework**