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Perceptions of Radiography and the NHS: A Qualitative Study

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Perceptions of Radiography and the NHS: A Qualitative Study

Purpose: To identify the factors that determine the attractiveness of radiography as a career choice and the NHS as an employer to potential recruits and returners.

Methods: Individual and group interviews were conducted in the East Midlands region to explore participants' perceptions of the attractiveness of the NHS as an employer to potential radiography staff. Interviews were conducted with school pupils, radiography students, mature students, radiography assistants, agency radiographers and independent sector radiographers.

Results: Eighty-eight individuals participated in the qualitative stage of the study. Analysis of the interview transcripts indicated that radiography as a career choice is perceived as boring and routine, involving high workloads and with little recognition from the general public. Working with patients is the source of considerable job satisfaction but is offset by staff shortages, lack of flexibility over working hours and a lack of consideration of family commitments in the NHS. Financial costs are highlighted as dissuading many participants from considering a career as a radiographer in the NHS or returning to work for the NHS. Greater use of open days in conjunction with more advertising of the profession is suggested as tactics to improve recruitment.

Conclusions: The provision of more flexible working hours, greater consideration for family commitments and increased financial support for training are necessary to improve the attractiveness of a radiography career. NHS Human Resource Managers should consider these findings concerning the applicant and returner pools when developing strategies to address the current shortfall of radiographers.

Key Words: Recruitment; Returners; Attractiveness; Employment, Image

Introduction

The continuing problem of the recruitment and retention of staff in the allied health professions (AHPs) and nursing within the National Health Service (NHS) has been highlighted consistently in the literature over the last ten years [for example: 1-4]. Despite this attention, the NHS is still struggling to recruit staff in these areas [5]. The NHS Plan [6] announced that, by the year 2004, 6,500 more therapists and other health professionals would be employed in the NHS. This increased demand clearly requires the supply of therapists, including radiographers, to increase dramatically even if there were already enough therapists to fill current vacancies. However, a survey of UK therapy radiography schools highlighted a total shortfall of 22 therapy radiography students for the 1999 intake, rising to 46 for the 2000 intake [7].

In terms of employment vacancy levels, shortfalls in radiography are also reported. In April 1999 there was an 11 percent shortfall in the number of therapy radiographers, representing 167 whole time equivalent vacancies spread throughout the UK [3]. At the same time, only 131 therapy radiographers were expected to graduate that year which meant that, even before attrition, 22 percent of the vacancies would go unfilled. Similarly, in a survey conducted by the Society of Radiographers, the situation for diagnostic radiography in 2000 suggested a 6 percent vacancy rate for diagnostic radiography and 11 percent vacancy rate for therapy radiography [8]. Furthermore, a study using the 1991 Census 10 percent database found that 20 percent of qualified

radiographers were working outside the profession and 14 percent were economically inactive [9].

Consequently, it is now vital that the NHS is able to identify strategies to change its recruitment patterns and expand its potential applicant and returner pools particularly with regard to radiography. To address this issue a team from **<Details removed for reviewing process>** University was commissioned by the Department of Health to carry out research into the ways in which the NHS is perceived as an employer by potential staff. The two-year project, which commenced in September 2000, focuses specifically on the radiography, physiotherapy and nursing professions.

One of the major aims of the research project was to identify and understand the key factors that encourage or dissuade potential recruits to choose a career in radiography and whether to pursue that career in the NHS. To achieve this understanding, the investigation was divided into two main stages. The first qualitative stage was designed to target those groups that may wish to enter the radiography, physiotherapy or nursing professions. The second, quantitative stage collected the views of a greater number of individuals thereby increasing the generalisability of the project's findings. The theory of planned behaviour [10] underpins both stages of the research project. The first stage provided formative research for the development of a questionnaire to allow the theory to be tested in the second stage of the project.

Six groups were identified consisting of school pupils; people currently in training (including Access and degree courses); people working for the NHS but not fully

qualified (for example, radiography assistants); and people who are already qualified but have chosen not to work for the NHS (for example, agency and independent sector radiographers). The first stage of the study, the results of which form the basis for this paper, is of particular interest because it allowed people to describe their experiences and perceptions of the NHS in their own terms. This paper focuses specifically on the results related to radiography. The structure of this paper is: firstly, a brief overview of the relevant professional and career choice literature and establishment of research objectives; secondly, a description of the methods by which the research instrument was developed, validated and ultimately executed; thirdly, the research results are presented and discussed; finally, their implications are assessed in the concluding discussion and recommendations.

Contextual Background and Research Objectives

Research into the process of choosing radiography as a career is relatively sparse. A survey of contemporary research literature reveals four main themes in connection with the choice of radiography as an occupation over the last decade.

1. Surveys of radiography school entry levels [for example: 7];
2. Career patterns of qualified radiographers [for example: 9];
3. Retrospective views of current radiography students on career choice [for example: 11–14];
4. Gender differences in radiography [for example: 15].

The majority of existing research investigated the reasons for choosing radiography based on the retrospective views of students studying for radiography qualifications. For example, family members, a hospital visit or tour and other health professionals have been identified as crucial factors affecting career and programme choice for radiography students [11]. Similarly, another study has highlighted the importance of reporting that in virtually all cases a specific incident or individual was responsible for the initial career choice [12]. The lack of alternative information sources is a problem encountered by many students who reported difficulty in finding information on radiography and said that their careers advisers seemed to know very little about the profession [13]. The situation appears to have improved more recently. In a survey of all UK therapeutic radiography students, a diverse range of sources of information about radiography were reported [14]. These information sources included university prospectuses and open days, careers officers, and family and friends. Nevertheless, despite the increasing number of information sources, both studies describe radiography as still having a poor professional image [13, 14].

The existing research on radiography recruitment appears to have some limitations. For example, work undertaken on recruitment, retention and return, has tended to be descriptive, but not informed by relevant social science theory. Similarly, some articles tend to focus on the individual rather than organisational or policy level concerns. Consequently, there is a need for research that addresses recruitment issues and relates these to the considerable literature concerning career choice processes. The following section briefly reviews some of this career choice literature.

Career Choices

Much is known about career choice processes and the factors that influence these decisions [16]. The formation of attitudes and the extent to which people's attitudes are, or are not reflected in their behaviour and choices [for example: 17] is also well researched. Some literatures are less well developed, but still offer helpful insights into factors that may influence the career choice process. These include corporate reputation [for example: 18], company employment image [for example: 19] and applicant attraction strategies for employing organisations [for example: 20]. The reputation and projected image of an organisation will determine the view people have of an organisation, but will become even more salient when a person is searching for work or the organisation requires more employees. Altering recruitment practices, modifying employment inducements and targeting non-traditional applicants have all been identified as possible strategies to attract more vacancy applicants.

All the strands of theory highlighted above inform the current study. However, because the time scale of this research precludes the tracking of behaviour over time, it will concentrate on attitudes and intentions to behave in certain ways. Although the link between attitude and behaviour may be problematic, the study is utilising the theory of planned behaviour [10] as the most useful theoretical framework for predicting future behaviour. The theory analyses the nature of attitudes and makes propositions concerning the circumstances in which attitudes predict behaviour. The theory has been successfully used in a range of applied settings associated with recruitment and retention. For example, the theory has been used to predict nurses' intentions to leave the profession [21] and used to predict nurses' intentions to leave the ward, hospital and

the profession [22]. Similarly, the theory of reasoned action (a precursor to the theory of planned behaviour) has been used successfully to predict employment decisions from campus interviews [23]. The success of these studies provides strong support for the continuing use of the theory of reasoned action and its updated version, the theory of planned behaviour, in studying intended behaviour in relation to recruitment and retention. Within the current study, interest centres on (i) the attitudes of potential radiography staff to working in that profession in the NHS, (ii) whether positive attitudes, where they exist, get translated into action, and (iii) if not, how that link could be strengthened.

To summarise the theory, Ajzen [24] states, '*according to the theory of planned behaviour, human action is guided by three kinds of considerations: beliefs about the likely outcomes of the behaviour and the evaluations of these outcomes (behavioural beliefs), beliefs about the normative expectations of others and motivation to comply with these expectations (normative beliefs), and beliefs about the presence of factors that may facilitate or impede performance of the behaviour and the perceived power of these factors (control beliefs). In their respective aggregates, behavioural beliefs produce a favourable or unfavourable attitude toward the behaviour; normative beliefs result in perceived social pressure or subjective norm; and control beliefs give rise to perceived behavioural control. In combination, attitude toward the behaviour, subjective norm, and perception of behavioural control lead to the formation of a behavioural intention. As a general rule, the more favourable the attitude and subjective norm, and the greater the perceived control, the stronger should be the person's intention to perform the behaviour in question. Finally, given a sufficient*

degree of actual control over the behaviour, people are expected to carry out their intentions when the opportunity arises. Intention is thus assumed to be the immediate antecedent of behaviour.'

It is noted by Ajzen that in order to apply the theory of planned behaviour successfully it is important to conduct formative research in order to inform the construction of a new questionnaire suitable for the behaviour and population of interest. Similarly, he adds that if beliefs are to be assessed, they must be elicited anew from a representative sample of the research population [25] . Consequently, the first stage of this research project is primarily exploratory and adopted a qualitative research strategy. Previous applications of the theory were used as a foundation for the development of an interview schedule with the original questions being adapted to enable their use in a qualitative research strategy and to ensure they were appropriate for the research context.

As well as providing important insights into the key elements required to develop a suitable questionnaire, the first stage of the research also provided the opportunity to explore the range of beliefs and attitudes that the different sample groups held in regard to a career in the NHS. It was envisaged that through the exploration of these issues it would be possible to identify changes in employment practice that would strengthen the positive features of working in radiography in the NHS that matter most to potential staff and reduce the most negative features. Consequently, the design of the first stage of the research project allowed the following two objectives to be addressed:

1. To identify the key factors that influence the beliefs and attitudes held by potential radiography staff when considering the attractiveness of the NHS as an employer.

2. To identify the key factors that influence the beliefs and attitudes held by potential radiography staff when considering the attractiveness of radiography as a profession.

Methods

The first stage of the study was intended to explore and understand participants' perceptions relating to the central theme of the research i.e. the attractiveness of the NHS as an employer to potential radiography staff. These findings were then to be used to construct a questionnaire for the second stage to formally test the theory of planned behaviour. Consequently, a qualitative approach was adopted for this stage of the study. This approach was chosen over a more quantitative approach to allow the broad focus of the investigation to be maintained but also to provide the opportunity for the capture of wider issues that may help the research team form a fuller understanding of the phenomena under investigation.

The study utilised a clear theoretical framework. The lack of existing empirical research concerning the attractiveness of the NHS as an employer meant the first stage of the research was primarily exploratory, rather than confirmatory, in nature. The relevant theories described in the previous section, particularly the theory of planned behaviour [10], were used to develop the interview structure adopted in stage one however, the

prime objective was to explore the relevance of these issues and identify participants' perceptions relating to the research theme, rather than testing a particular theory.

The most appropriate method for the exploratory research was individual and group interviews. Group interviews of approximately eight interviewees were adopted whenever possible for sample groups 1-4 (see Table 1) although some individual and small group sessions were required for practical reasons. Group interviews were chosen as the primary method for these groups because they were quicker and cheaper to conduct than individual interviews with the same number of respondents. By contrast, individual or small group interviews were the main approach for sample groups 5 and 6 as it was considered impractical to attempt to arrange larger group sessions for these individuals. In total 88 participants were interviewed about radiography across the six different sample groups although as Table 1 shows, it proved difficult to access radiographers working in agencies and the independent sector.

Take in Table 1 here

All the interviews followed a common semi-structured topic guide. Adopting a semi-structured approach allows the interviewer to ask certain major questions the same way each time, but remain free to alter their sequence and probe for more information. The interviewer is therefore able to exert some flexibility over the interview style, tailoring it to the level of comprehension and the ability of the respondents to articulate. It also facilitates flexibility for the interviewer to respond to the issues raised by participants

[26]. A small number of pilot interviews were carried out in order to ensure the usefulness of the interview schedule and format.

Content of Interview Schedule

The interview schedule had five sections: images of the NHS and radiography; the best and worst aspects of working for the NHS as a radiographer; the views of people that were important to participants; barriers to entering the NHS as a radiographer; and how the NHS could be made more attractive as an employer to potential recruits and returners to radiography. While each section was designed to explore elements of the theory of planned behaviour, in order to present a coherent interview structure to the participants, some elements of the theory were addressed across more than one section. For example factors that may influence control beliefs were addressed in both the first and second sections of the interview schedule.

Images of the NHS and Radiography

The aim of this section was to explore the participants' views of the NHS' reputation, to find the sources of people's image of the NHS and to understand the recruitment image presented by the NHS. Fombrun [18 p.37] defines reputation as representing the 'net' affective or emotional reaction of customers, investors, employees and the general public to the organisation's name. That is the outsiders' view of an organisation. Corporate image is based on an individual's evaluation of information obtained from sources such as advertisements, the media and friends. These may include GPs, hospital visits, television, news, advertisements, novels/magazines etc, friends, close family and/or relatives. The recruitment image which is affected by recruitment

messages (i.e. recruitment publicity) will also contribute to Ajzen's control beliefs as they will set out some of the limitations to the behaviour of intending to apply to work in the NHS [27, 28]. In addition, control beliefs may be based on past experience with the behaviour, by second hand information, by the experiences of acquaintances and friends and by other factors that either increase or reduce the perceived difficulty of performing the behaviour. These questions coincide with Fombrun's measures of corporate reputation [29 p.46].

Best and Worst Aspects of Working for the NHS

The aim of this section was to explore the attributes associated with working in the NHS as a radiographer and the control beliefs participants have towards working in the NHS as a radiographer. The way in which an individual perceives the different employment issues such as pay, workload and promotion prospects will affect their behavioural beliefs in Ajzen's model. This will therefore affect their intention to carry out behaviour such as applying or returning to the NHS, staying in the NHS or moving to alternative employment. Questions in this section were adapted from work by Sparks and Guthrie [30].

Views of People Important to Participants

The aim of this section was to explore the extent to which working in the NHS, returning to the NHS or entering the nursing/physiotherapy/radiography profession was an important component of the person's self-concept [31, 32] and to explore the influence of the group norm on individual's decisions.

Barriers to Entering the NHS

The aim of these questions was to find out whether individuals think there is equality or inequality of opportunity within the NHS. If inequality exists then a person's expectations of the consequences of a behaviour will to some extent be dependent on the source of that inequality. This expectation will in turn affect the attitude of the person towards the behaviour and the likelihood of them intending to carry out the behaviour. Diversity including employment flexibility like family friendly policies should encourage people to return to the NHS. The perception or reality of there being environmental obstacles to employment within the NHS would contribute to Ajzen's control beliefs and perceived behavioural control as to whether someone is able to carry out an intention. Questions in this section were adapted from work by Luzzo [33].

Social pressure to comply with the norm, for example men not working in women's work, may also affect the normative beliefs in Ajzen's model; these represent the social pressure to comply. Inequality may come both from the employee's background and their beliefs about the employer's perspective. Questions in this section were adapted from work by White et al. [34] and Terry and Hogg [35].

Making the NHS More Attractive as an Employer

This section had two aims: To find out the aspects of the NHS that encourage or discourage people from working in the NHS and; to find out which employment issues are seen as most significant. Ajzen's theory [10] suggests that the attitude that a person has towards behaviour, will be affected by the degree to which the person has an unfavourable or favourable view of the outcome of the behaviour. This question seeks

to find out the things about working in the NHS that ‘turn them on’ or ‘put them off’. One suggestion of an area of interest in this respect is employment inducements [20 p.294].

In addition, at the end of the interviews participants were encouraged to revisit or raise any other issues that they felt were important associated with the attractiveness of the NHS as an employer to potential nursing and AHP recruits.

Targeting of Participants

For each of the six groups organisations based in the East Midlands of England were initially targeted. A letter of invitation was sent to each organisation outlining the aims of the research project and detailing the extent of participation that was desired. The interviews were conducted in 2001 between February and August and at least two participating organisations were used in order to reduce the possibility of collecting views from a single organisational perspective. The majority of sessions were conducted in-situ at the host organisation, although a small number of interviews were conducted at the interviewees’ home or by telephone. The interviews lasted approximately one hour and prior to the start of each session the facilitator explained the aims of the interview: that it was intended to gain an understanding of the participants’ perceptions of the attractiveness of the NHS as an employer. It was also indicated to the participants which other groups of people were going to be interviewed and that the intention of the research exercise was to gather views reflecting potentially different perspectives on the NHS. This emphasis was made to reassure participants that the

research would record an accurate and balanced impression of the NHS and not be polarised towards particular individuals' or groups' views.

In addition, efforts were also made to indicate to participants that although the interview had a clear structure in terms of its content with questions about specific aspects of the NHS and the professions, it was for the participants to indicate whether they felt that these issues were relevant to the attractiveness of the NHS as an employer [36]. Participants were encouraged to volunteer additional information should they feel it was relevant to the overall aims of the session.

Finally, it was emphasised to participants that the interviews would be completely confidential and no quotes would be directly attributable. It was also explained that a report would be produced from the interviews for the Department of Health and the organisations that participated. All the participants agreed to have the sessions tape-recorded and the tapes were duly transcribed verbatim. To ensure the validity of responses participants were encouraged to provide specific examples to support their statements.

Data Analysis

The analysis of the transcripts involved the three concurrent activities of data reduction, data display and conclusion drawing/verification [37]. Data reduction was utilised to analyse each interview transcript using a structured coding framework. Data display was facilitated through the use of the qualitative software package QSR N'Vivo.

Initially, using a sample of nine transcripts (12 percent), four of the project team independently identified themes contained within these transcripts that were subsequently discussed and reviewed at a series of project team meetings. These themes were combined to develop a detailed framework of hierarchic codes. The coding structure then went through a number of iterations with the whole project team reviewing its applicability and testing its validity on new transcripts. The codes were subsequently applied to all transcript data using N'Vivo. The coding structure was sufficiently broad to allow the majority of the issues raised by the transcripts to be adequately coded. Any new issues were dealt with by allocating them to a higher level code and were revisited during the analysis.

The analysis of the transcripts indicated the most common codes and therefore themes, identified by participants when asked about a particular issue, for example images of the NHS. The importance associated with these themes was judged by the research team in terms of the number of times a particular theme had been coded, the significance of the theme in relation to existing literature and the nature of the discussion that the theme was raised in (through reference to the original transcript). The themes discussed in the results section of this paper are therefore presented in a considered order of importance. However, it is important to note that the specific number of participants making particular comments have deliberately not been reported for two reasons.

Firstly, when analysing group interviews it is only possible to code what the participants say. If two participants comment that they are in favour of more pay for healthcare professionals, but the remaining six participants do not comment, it appears that this

may have been a minority view. However, this interpretation infers that people do not speak because they do not agree with what is being said. It is possible that these participants have chosen not to speak because the point they were going to make has already been made and they do not feel the need to repeat it. Consequently, it is clear that little can be accurately inferred about participants' views when they offer no comment and no physical reactions (for example, nodding of head) are recorded.

Secondly, another reason for not placing great emphasis on the number of participants that make particular comments is the fact that both individual and group interviews of varying sizes have been adopted during the study. When both group and individual interviews have been adopted for the same sub-sample, for example non-professionally qualified staff working in the NHS, it was desirable to combine the responses without differentiating on the basis of interview style i.e. individual or group. However, the two styles are significantly different in the way data from participants are recorded, the individual interviews providing more complete data, each question having been specifically posed to the interviewee. Greater weight could be assigned to the comments made in individual interviews than in group interviews. However, this makes within and cross-group analysis problematic and the presentation of numbers potentially misleading.

As a result of the issues outlined above it was considered appropriate not to include specific numbers of participants, or numbers of comments in the results section of this paper. The second, quantitative stage of the study is designed to specifically address

these issues and thereby complement the qualitative stage of the research. The following section outlines the key issues reported from the interviews.

Results

The results are divided into five main sections reflecting the structure of the interview schedule as presented to participants. The first section is concerned with the perceptions of the different sample groups toward radiography as a profession. The second section considers the best and worst aspects of working as a radiographer for the NHS. The third section outlines how the participants expected people who are important to them to react if they were considering a career as a radiographer in the NHS. The fourth section presents the barriers that were identified as preventing participants from entering radiography or returning to work for the NHS. Finally, the fifth section reviews how participants thought the NHS could be made more attractive as an employer.

Images of Radiography

When discussing the images that the terms 'Radiography' and 'Radiographer' engendered a number of themes were identified from participants' comments. Many participants identified descriptive perceptions of the role such as *'button pushers'*, *'taking X-rays'* and considered a career in radiography as *'not sexy'* in comparison to other career options. Other images that were mentioned were that the profession involved *'hard work'* and that the staff were often *'overloaded with work'*. The school pupils, largely due to their limited knowledge of the profession, tended to draw on personal experience to describe the activities of a radiographer, for example *'taking X-*

rays for sporting injuries'. It was acknowledged by many of the groups that radiography played an important role, particularly in diagnosis, but many participants took the view that the general public did not recognise this contribution and that radiography sometimes suffered from low recognition from other healthcare disciplines. The student groups and assistants discussed inter-professional relations, saying that nurses get *'all the credit'* and that radiographers have a lack of respect from other healthcare professions, leading to a lack of teamwork. The students added that this lack of recognition was further compounded through low pay levels and the potential hazards of working with radiation, making the profession appear less attractive as a career choice.

Best and Worst Aspects of Working for the NHS as a Radiographer

When asked to describe the best things about working for the NHS as a radiographer the most frequent responses from participants in groups 1-4 (unqualified participants), were about working with patients. The interaction with patients was thought to contribute directly to high levels of job satisfaction. Several participants commented about being appreciated by patients for the ways in which healthcare staff had contributed to their care and well-being. For example, a radiography assistant commented, '*Knowing that I've helped someone, the public. I feel that now, that's why I came into this profession'* and a radiography student added, *'That warm fuzzy glow you get from helping others'*.

Other positive aspects of working for the NHS as a radiographer identified by these groups were job security and job availability, which in turn provide geographical flexibility. In addition, some of the participants also highlighted the variety in the day-

to-day work and that this too was a positive attribute of the NHS. A mature student commented, '*You are not looking after one person in radiography, you might see 100 patients and you'll have a seven day old baby and then you've got a 103 year old woman. You see people from all walks of life'.* Collectively, the six groups also identified the breadth of training opportunities available in the NHS, the social benefits of working in a large hospital and also being supported by colleagues in the team.

The radiographers working for the independent sector highlighted similar themes of working with patients, feeling appreciated and the teamwork involved in radiography as being the best things about working in the independent sector. They added that, having chosen to work for a private sector employer they enjoyed the advantages of being able to work part-time if desired, working at a slower pace, having more time to spend with patients and generally working in more comfortable working conditions. It was also evident that some of the participants currently working in the NHS perceived that working outside it would have distinct benefits. For example a radiography assistant commented '*the pay is probably a lot better, the conditions of service as well. Somebody I know had a fresh uniform put out for them every morning, they didn't have to take their laundry home and do it. There were meals provided on duty. After a qualifying period they actually had private health cover so they were able to get in the door a bit quicker than going in through the NHS'.*

The advantages of choosing to work for an agency were similar to the independent sector, the main ones being better pay, more flexibility, and control over the hours worked. For example, an agency radiographer stated *'I know the agency will*

accommodate me because they are making money out of me.' Due to the demand for radiographers the agency staff also indicated that they had considerable flexibility over the variety of posts available if they wanted to move around between different departments or to different geographical areas.

When the discussion turned to what participants thought would be the worst aspects of working for the NHS as a radiographer, the students and radiographers working in the independent sector both focused on staff shortages leading to a stressful work situation. Staff shortages were thought to contribute to a downward spiral of not being able to spend enough time with patients, feeling that they were providing a poor level of service, low morale and a lack of job satisfaction. An independent radiographer described their own experience of this problem in the NHS stating, *'It became increasingly difficult to maintain a sense of humour. You know, there should have been periods of calm when people could relax a bit and then laugh about things. There was less and less time to do that'*. The shortage of qualified staff was also thought to have other knock-on effects such as a lack of flexibility over annual leave and having to work long or irregular hours. For example, a student stated, 'Y*ou are just working so many hours as well because it's not flexible because there aren't enough staff*' and an independent sector radiographer added, *'It was the on call system and the weekends that made me go over to the private…I didn't feel that disloyal by moving over, it was just the hours suit, it's more convenient'*.

Additional issues that were identified by these two sample groups were poor working conditions, having to make do with old equipment, having to cover for a lack of

qualified staff, a lack of career opportunities and generally feeling underpaid and under valued. A radiography assistant commented *'you are doing a really good job and you're feeling that you are motivated but there is nowhere else to go. I think that's frustrating'* and a student added that they were concerned that they would *'stay as a basic grade radiographer for the next 20 years in the same hospital'.*

The radiography assistants reported that they thought there was a lack of positive feedback from managers to staff in the NHS commenting:

- *'That's my experience in the NHS. Nobody stops long enough to say thank you. To appreciate what the staff do put in';*
- *'A pat on the back and "thank you" or "well done team", goes a long way. Pretty cheap too really';*
- *'I think it's [the NHS] got to make its staff feel more valued and I don't think it does at the moment'.*

These comments are in line with the views of the radiographers working in the independent sector who said that they had experienced higher levels of recognition and teamwork working outside the NHS. Other issues that were mentioned by participants included the bureaucratic management system in the NHS, aspects of occupational health and safety working in radiography, having to deal with negative attitudes and physical danger from patients and the fear of litigation.

The results suggest that the job satisfaction derived from helping people is seen as one of the most attractive aspects of working as a radiographer. This positive image is further supplemented by the view that the NHS provides a high level of job variety, job security and opportunities for continuing professional development. However, these benefits seem to be offset by the more negative aspects of staff shortages, lack of recognition, poor quality equipment and a lack of flexibility over working hours. These results suggest that there are several significant factors that are likely to be dissuading potential recruits and returners from considering a career as a radiographer in the NHS.

Views of People Important to Participants

The comments of the unqualified respondents were consistent when discussing what they thought the people that were important to them would think should they choose a career in radiography in the NHS. The participants frequently referred to the view of their friends and family and stated that they would be supportive and proud if they chose to work for the NHS as a radiographer. A number of participants commented that their family and friends would view the decision as a positive step that is well respected and provides an essential public service. For example a radiography assistant commented: *'my husband would be delighted. He's been saying it for years. Yes he would be thrilled to bits I'm sure. I wouldn't get any negative feedback at all. I think some of them think that's what you do anyway, even though you always say to them "I'm an Assistant, not a Radiographer". I am trying to get out of the way of saying 'only' an Assistant. I am an Assistant. No he would be delighted'* (Radiography Assistant).

However, several participants also mentioned that although their friends and family would be positive and supportive they were also likely to highlight the more negative aspects of working for the NHS as a radiographer. The issues that were commonly cited were health and safety issues, low pay and high levels of stress and pressure. For example, one participant commented that their parents had difficulty understanding their career choice: *'they think I'm mad! But they think you must do it because you like people, there can't be any other reason for working in the NHS'* (Radiography student).

The qualified staff commented that they thought the people that were important to them would be either supportive or simply non-committal should they choose to return to work for the NHS as a radiographer. Several participants stated that their friends and family would be surprised if they returned to the NHS and a number added that their friends and family would not attempt to influence their decision to work in a particular sector, so long as the participant was happy in their career choice. Similarly to the unqualified staff, the qualified staff thought that their friends and family would highlight the pressure, stress and low pay in the NHS if they were considering a return to the service.

Barriers to working for the NHS

As well as mentioning negative aspects of working for the NHS, the participants also identified a number of barriers or obstacles that made entering the profession more difficult. For the majority of the groups, the main barrier was seen as the financial costs of becoming a radiographer or returning to work for the NHS. For example, the mature students reported a range of financial disincentives to training as a radiographer

including the cost of books, travelling to study centres, child care costs, the loss of wages while undertaking training and the resulting debt or worry about existing financial commitments such as a mortgage. School pupils and radiography assistants also aired these concerns. Interestingly, the students who were currently undertaking radiography training did not identify the costs or potential debt that they were likely to incur as having been a barrier to training to become a radiographer. This may be due to either a resignation that these costs were inevitable or that these particular students were better placed to deal with the financial burden of training.

A barrier that the student radiographers did identify, that was shared by the other groups that were not qualified radiographers, was a lack of flexibility toward family commitments. This was thought to be a problem both during the training period and also once working for the NHS, the latter also being cited by staff working for agencies and the independent sector. Other issues that participants identified as being potential barriers were having adequate qualifications for entry onto a course (mature students, radiography assistants), the ability to pass examinations (mature students, radiography assistants), the length of training (school pupils, radiography assistants) and their age (radiography assistants). To counter some of these problems, the radiography assistants were keen for an alternative route to a radiography qualification to be available, one that they could undertake alongside their current role. An assistant stated, '*the thought of working towards a degree and going to University and everything, that all seems for me a bit daunting. But the thought of just like doing it, sort of gradually, that sounds better to me than just being thrown in at the deep end and thinking I can't do it*'.

The level of pay in the NHS was considered a significant barrier by staff that were working for agencies or the independent sector. This perceived drop in income, coupled with less flexibility in terms of hours made returning to the NHS unappealing. An agency radiographer commented, *'the reason I do agency is because they pay. I don't want to work in the NHS because I've got flexibility and control, and there is nothing, other than someone offering me £100,000 to do a six months contract, possibly nothing that would entice me back'*.

How could the NHS be made more attractive as an employer?

The next part of the interview asked groups to identify how they thought the NHS could be made more attractive as an employer to potential radiography staff. All groups cited increased pay levels. In addition, the majority of sample groups thought that an increase in staff numbers would reduce the stress and pressure on staff, thereby creating a more appealing working environment.

Other factors that were identified included increased the flexibility of working hours and increased occupational benefits such as better annual leave entitlements, a counselling service and better car parking facilities. These improvements were considered necessary to improve the balance between what participants saw as significant personal investments on their behalf and only moderate levels of return. For example, a radiography student commented that there needed to be, *'More perks to the jobs because you put in so much to the NHS and you don't really take much away with you apart from your personal sense of achievement'*. Related to these issues was a need for greater recognition from both the general public and other healthcare professions,

(emphasised particularly by the radiography students). A student stated, *'Recognition. Recognition, recognition. More awareness of what we actually do, not only the staff but the public.'* Another student added, *'People just aren't going to stay in a job where they don't feel appreciated, don't feel they get the right recognition'.*

In terms of specific recruitment strategies, participants thought that greater use of open days to introduce potential applicants to the different professions available in the NHS, such as radiography, in conjunction with greater levels of advertising would help to raise awareness of the profession and encourage more people to consider it as a career option. One student stated that, *'the fact of needing a degree sometimes puts people off initially. They think it's a degree, I can never do that. There needs to be a lot more explained about what's actually involved, that it is achievable'.* In order to improve the accessibility of the profession to unqualified staff, the radiography assistants and mature students thought that on the job training, increased bursaries for training courses and more time being made available for staff wishing to study would help with the recruitment process.

Discussion

Having reviewed the main images and perceptions associated with the profession of radiography and in particular working for the NHS as a radiographer, it is important to contexualise these results within the relevant literature and in so doing, establish their contribution. The implications of the study for the construction of the stage two questionnaire, for NHS Human Resource Managers and the NHS as a whole also need to be reviewed, as do the study's potential limitations.

The first stage of the investigation was not intended to explicitly test the theory of planned behaviour but to inform the design and development of the questionnaire to be applied in the second stage. The findings presented in the previous section are useful because they identify a number of factors that relate to the different aspects of the theory in the context of recruitment of radiographers to the NHS. With regard to behavioural beliefs about the likely outcomes of working for the NHS as a radiographer, the role was associated with high levels of stress, staff shortages and a lack of time to spend with patients. In addition, a poor working environment with little support from managers was also considered likely. These negative beliefs were offset by more positive aspects of the career including working with patients, high job satisfaction job security and availability, variety in work content and good training opportunities. When evaluating these views in contrast to alternative employment, opportunities outside the NHS were considered more attractive by staff currently working for agency and the independent sectors. The radiography assistants, the only participants that were currently working for the NHS, also supported this view.

With regard to normative beliefs it is clear from the findings that the majority of participants would expect people that are important to them to be supportive and in many cases proud should they choose to join the NHS as a radiographer. The findings suggest that there would be limited pressure exerted by participants' friends and family to try and influence their career choice decision so long as the participant was content. However, it was expected that some participants' friends and family would highlight the downside to a decision of joining the NHS as a radiographer.

Three main issues were identified in the findings with regard to control beliefs namely financial cost issues with regard to training, a lack of flexibility towards family commitments and lower pay levels when comparing the agency and independent sectors to the NHS. These factors were identified by the majority of participant groups and their relative importance in comparison to the other elements of the theory of planned behaviour will be tested in the second stage of the research.

One the key aims of the first stage of the research was to identify the key factors that may influence an individual's decision to join the NHS as a radiographer. However, these findings do not indicate the relative strength of the different factors in influencing the different elements of the theory and similarly the findings cannot explore the relative strengths between the different elements of the theory in influencing intention. These issues will be explicitly addressed in the second stage of the study.

Whilst a small number of previous studies have addressed the recruitment crisis in radiography, they have only considered the issue in the context of individual applicant pools [for example: 11, 12, 14]. Consequently, this research makes a significant contribution by presenting a collective perspective of the views of six different sample groups of potential applicants to radiography and returners to the NHS. By addressing each of these sample groups using a common research instrument it is possible to directly compare and contrast the differing views held across the sample groups and thereby present evidence to help inform and develop a co-ordinated recruitment strategy for the NHS. Despite the relatively small sample on which these results are based, they are given added credibility when interpreted in light of the radiography literature,

especially that concerned with existing working conditions in the NHS. For example, the results presented in this paper support existing research that found that qualified radiographers working for the independent sector or agencies described more part-time work and flexible hours together with the provision of refresher courses as the features most likely to encourage them to return to public sector radiography [9]. Similarly, when surveying radiographers who had a gap in their service, a study reported a lack of part-time or job share opportunities and a lack of childcare facilities were significant barriers when considering a return to radiography [7].

Low pay levels have been previously identified as a factor that makes working for the NHS as a radiographer unattractive [8] and this lack of appeal is further compounded by the high workloads that many radiography staff have been experiencing [38]. The results of this study support these observations and reinforce the need for a review of existing pay levels coupled with a reduction in workloads for staff. Unfortunately, in order to achieve the latter, the most popular solution identified by participants in this study is the recruitment of more staff, which suggests a conundrum.

It is also interesting to note that the results identify a number of less well-documented factors associated with radiography as a career choice. For example, the results suggest that many participants perceive radiography to be a boring and repetitive role that had added risks due to working in close proximity to radiation. This finding illustrates the concerns held by some potential recruits regarding radiography and emphasises the need for changes to be made in the professional image, particularly with regard to safety at work. Furthermore, low pay levels, although significant to some participants, were not

mentioned as consistently as expected considering the high attention given to pay by the media. These results suggest that although pay issues are generally thought to be important in career choice decisions concerning radiography, they may not be as important to potential applicants as other issues. For example, school pupils, students and mature students tended to focus on flexible working hours and support for family commitments than pay levels, when considering a radiography career.

One possible solution to the recruitment problem appears to be increasing the accessibility of the profession to both existing qualified staff through increased part-time job opportunities and to unqualified staff, through more flexible training schemes or cadetships with a supporting income. This study suggests that improvements in the promotion of the radiography profession would also help to encourage new recruits and encourage greater levels of recognition from the general public, which in turn may help to retain existing staff.

Research into the recruitment of radiographers across six differing sample groups is an ambitious undertaking and therefore contains a number of inherent limitations. In particular, the adoption of a qualitative interview based approach in the first stage of this study limited the number of organisations it was possible to target and therefore reduces the generalisibility of the results of this study. The selection of a relatively small number of interviewees to participate in the study, especially with regard to the independent and agency sectors, is also the source of potential bias. Consequently, although the study provides many interesting and novel insights, these limitations should be taken into account when interpreting the results. Whilst this first stage of the

research has provided a strong indication of the issues that need to be included when adopting the theory of planned behaviour, further research is required to confirm which of these issues are the most important in influencing the attractiveness of the NHS as an employer to potential radiography staff. The second stage of the study is designed to explicitly explore these issues using a questionnaire and enables the relationships between attitude toward joining the NHS as a radiographer, subjective norm, perceived behavioural control and intention to be statistically tested.

Conclusions and Recommendations

This paper provides an overview of some of the key factors that appear to be influencing current levels of recruitment and retention of radiography staff in the NHS; an important, yet largely neglected research domain. It explores explicitly the views of six different groups of potential recruits and returners and identifies several possible strategies that could be adopted to improve existing levels of recruitment. This study has emphasised that in order to reduce the current shortage of radiographers, it is important that any recommendations take in to account the different needs of each group. To ignore them risks missing a vital source of potential applicants in times when the radiography profession is facing intense competition from alternative career choices. Specific recommendations, based on the results reported in this paper include:

- Increasing the awareness, of both the public and healthcare professional staff, of the value and contribution of the radiography profession;
- Providing improved levels of feedback between staff and management to facilitate a greater sense of value among staff;

- Improving staffing levels by increasing the flexibility of employment patterns and accommodating staff with family commitments;
- More flexibility over entry to professional training, supported by a structured route for radiography assistants to achieve qualified status while working, and increased bursaries for mature students;
- Improved levels of pay;
- Improvements in the working conditions in radiography departments, such as improving the physical environment and quality of the equipment available.

In a constantly changing and ever more demanding healthcare environment, the ongoing recruitment and retention of sufficient numbers of radiography staff is critical to the provision of an effective health service. Understanding the perspectives of potential staff are vital to ensure that working as a radiographer for the NHS remains an attractive career choice.

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Table 1: Sample Groups and Number of Participants Interviewed about Radiography

Main Sample	Specific Sample Group	No. of Participants
Not qualified or working for the NHS	1. Year 11 School pupils (aged 15-16)	30*
	2. 'Mature' students on healthcare or access to the professions courses	18
Not qualified but are working for the NHS	3. Students undertaking professional radiography training	18
	4. People working for the NHS but not as qualified nurses or allied health professionals	17
Qualified but are not working for the NHS	5. Qualified professionals working for an agency	2
	6. Qualified professionals working for independent sector organisations	3
	Total	88

*****For school pupils, both radiography and physiotherapy, representing the allied health professions, were discussed.