

**Improving the Recruitment and Return of Nurses and Allied Health  
Professionals: A Quantitative Study**

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November 2005

**Short title: Improving the Recruitment and Return of Nurses and AHPs**

**Revised Version 1 - 02 May 2006**

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# **Improving the Recruitment and Return of Nurses and Allied Health Professionals: A Quantitative Study**

## **Abstract**

The United Kingdom National Health Service is continuing to experience recruitment and retention problems of nursing and allied health profession staff. Consequently, the need to study and understand the key factors that encourage or dissuade people to work for the NHS remains a major research and policy issue. This study provides well focused, independent research to explore how the NHS can be made more attractive for potential new recruits and possible returners. The views of potential recruits and returners interested in working for the NHS as either a qualified nurse, physiotherapist or radiographer were explored through a postal questionnaire survey which achieved a response rate of 23%. Analysis of the results indicate that the strongest predictor of intention to work for the NHS in one of the three professions was the attitude held by respondents. These attitudes in turn, were most influenced by the extent to which people perceived that NHS work as a qualified nurse, physiotherapist or radiographer offered positive features i.e. rewarding career, teamwork, and a chance to help people and to get to know them. The views of family and friends regarding working for the NHS were also important as was the belief in one's ability to secure an NHS job.

## **Keywords**

Recruitment, return, nursing, allied health professions, physiotherapy, radiography, NHS, questionnaire.

## Introduction

In the last 10 years, the number of people entering the United Kingdom National Health Service as healthcare professionals has fallen. This has coincided with high levels of attrition, and has meant that attracting NHS staff has become an increasingly important policy goal.<sup>1</sup> This concern has been reflected in the high level of attention given to these issues by the media and research by professional associations. Much of this attention has concerned the nursing profession, which has been suffering from a shortage of qualified staff for some time.<sup>2,3,4</sup> However, other areas such as the allied health professions (AHPs) have also been experiencing recruitment and retention problems.<sup>5</sup> Although recent figures suggest that the number of nurse recruits and returners to the NHS is improving<sup>6</sup> it is acknowledged by academic experts and the Department of Health, that nurse recruitment will require continual attention.<sup>7</sup> Similarly, the Department of Health is now specifically targeting increased recruitment for the AHPs<sup>8</sup> and work force planning is to become more high profile.<sup>9</sup> Therefore, the need to study and understand the key factors that encourage or dissuade people to work for the NHS remains a major research and policy issue.

Although some survey work on recruitment, retention and return has been undertaken by professional associations,<sup>10</sup> this work tends to be descriptive and not informed by relevant academic theory. Similarly, articles in the professional literature about career choice<sup>11</sup> tend to focus on the individual rather than addressing concerns at an organisational or policy level. Trusts themselves undertake various activities in respect of newly qualified recruits<sup>12</sup> and qualified returners,<sup>13</sup> but these tend to be localised initiatives. Whilst these initiatives are clearly important, addressing generic problems requires more systematic and generalisable research. Some independent

research has provided a brief coverage of some relevant issues in respect of nursing<sup>14</sup> and AHPs.<sup>15</sup> However, once again, much of this has been descriptive and has not incorporated theory to aid prediction and help inform policy.

There is, therefore, a need for well focused, independent research to provide insights into how the NHS can be made more attractive for potential new recruits and possible returners. This study addressed the nursing profession and used physiotherapy and radiography to represent the allied health professions. The study gathered the views of a wide range of different groups of potential recruits and returners to the three professions. This approach was taken to ensure that the conclusions drawn from the research would be applicable across groups, thereby maximising the potential impact for recruitment and returner strategies for the NHS. The project employed a two stage process of data collection and this paper presents the results from the second, quantitative stage. The first qualitative stage has been reported elsewhere.<sup>16,17,18</sup> As well as providing valuable data in its own right, the first stage was intended to inform the design of the questionnaire used in the second stage.

The paper begins by reviewing the existing literature concerning potential recruits and returners for each of the three professions. The theoretical framework that guided the investigation is then explained and the research objectives established. The methodology section discusses how the theoretical framework, existing literature and results from the exploratory research conducted in the first stage of the study helped to develop the research instrument and how the data collection was executed. The results of the study are then provided, followed by a discussion of the findings and their implications.

## **Literature Review**

A summary of the range of different potential recruits and returners surveyed in this study is provided in Table 1. The following three sub-sections review the literature associated with recruitment and return for each of the three professions of interest and specific reference to the groups surveyed in this study is made where previous studies were identified.

### **Nursing**

A number of themes emerge from the studies that have investigated the issues associated with choosing a career in nursing. One of the strongest themes concerned nursing being perceived as an opportunity to help and care for people. Foskett and Hemsley-Brown<sup>19</sup> found that young people identified the ability to help people as a reason to enter nursing. Similarly, students perceive nursing as a career which offers opportunities for caring for people<sup>20</sup> and in helping them lead healthy lives.<sup>21</sup>

Characteristics of the work are also frequently mentioned in both positive and negative terms. When explaining their reasons for choosing a nursing career, students of nursing tend to emphasise job security, recruitment opportunities and opportunities to promote their own personal development.<sup>20</sup> By contrast, young people associate many negative images with nursing work. For example, Firby<sup>2</sup> found that girls tend to associate nursing with unpleasant and dirty work. Pay issues, a lack of support for family commitments and childcare arrangements have also been identified as dissuading young people from a nursing career.<sup>22,23</sup> These negative views are compounded by many young people perceiving the role of a nurse to be supportive rather than proactive, acting as a helper to doctors and providing care rather than treatment.<sup>19</sup>

The negative characteristics of nursing work in the NHS have also been identified as reasons why some qualified nurses have chosen to work in the independent sector and for agencies. Agency staff have reported that they experience more family friendly policies and increased flexibility allowing those staff who cannot commit to full time shift work with a Trust still to work in the NHS. Some nursing agencies also provide education, on-going professional development programmes and free study days to improve retention. Furthermore, the rates of pay are also usually higher for agency staff than those offered by NHS Trusts.<sup>24</sup> Flexible working was also identified as a benefit of working in the independent sector and these health care professionals believed they were able to provide higher quality care and were more able to use the full range of their practice skills.<sup>25,26</sup>

For mature students, negative views on following nursing as a career choice were less associated with the actual work, but focused more on the significant sacrifices that had to be made to undertake the training. For example, domestic and family problems have been reported as a direct result of participating in a course of basic nurse education.<sup>27,28</sup> Similar concerns have been raised by Healthcare Assistants when deciding whether to undertake training to become a qualified nurse with the cost of training and loss of regular income seen as significant barriers to this progression.<sup>29,30</sup>

### **Physiotherapy**

Like nursing, studies exploring why students have chosen physiotherapy as a career choice report that the need 'to help others' is an important factor. In addition, prestige, autonomy and the opportunity for advancement were also identified.<sup>31,32</sup> Similar positive themes were found by Young<sup>33</sup> when surveying mature students that were interested in pursuing a career in physiotherapy. Having the opportunity to help

people was reported as an important influencing factor as were disillusion with a previous way of life and a need for a change in career direction.

Studies of physiotherapy students have also considered students' career choice decisions when choosing their first NHS post. The major factors influencing job choice were identified as: the attitudes of potential superiors; in-service training; attitudes of potential colleagues and post-registration courses.<sup>34</sup> However, there are concerns that many students are put off staying with the NHS beyond their first post. Poor pay, especially while paying back student loans and stressful working conditions have been identified as deterring many graduates from staying in the NHS.<sup>35</sup> The need for better pay levels and greater opportunities for professional development has also been identified for physiotherapy assistants. Ellis et al.<sup>36</sup> report that although many physiotherapy assistants were satisfied with their jobs overall, they were dissatisfied with pay levels and career development opportunities.

As the concerns regarding pay and career development increase in relation to physiotherapy work in the NHS, so the opportunities for physiotherapists to work through an agency have also risen in recent years. Working for an agency as a physiotherapist is proving to be financially attractive with higher rates of pay than those offered in the NHS.<sup>37</sup> Alternatively, some physiotherapists are choosing to work outside the NHS completely and have reported improved working conditions, more time for patients and more support for training and professional development by working for independent hospitals.<sup>10</sup>

## **Radiography**

The majority of existing research concerning reasons for choosing radiography as a career is 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.<sup>38</sup> Similarly, another study has highlighted that in many cases a specific incident or individual was responsible for the initial career choice.<sup>39</sup> 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.<sup>40</sup> Although more recent research suggests that the range of information sources is improving, radiography is still described as having a poor professional image.<sup>41</sup>

For those qualified radiographers thinking of returning to the NHS, a number of barriers were identified. These barriers included a lack of part-time or job share, childcare problems, loss of confidence, lack of formal retraining and unhelpful attitudes from colleagues.<sup>42</sup>

### **Critique of Literature**

Much of the existing research concerning the three professions has been conducted on specific sample groups such as students in professional training, or young people still at school. This research is useful in terms of understanding the particular sample group, but because these studies are conducted in isolation, comparison across different groups of potential staff is problematic. It is therefore difficult to gauge the extent to which perceptions, and factors that influence those perceptions, are common across different groups of potential staff. This study specifically addresses this weakness in the existing research by surveying a wide range of different sample groups of potential recruits and returners to nursing and the AHPs using a standardised research

instrument. Consequently, this research provides a broad overview of the perceptions and influencing factors for potential staff to all three professions.

This study also explores the commonalities and differences in perceptions with regard to the nursing, physiotherapy and radiography professions. It allows a comparison of findings between professions and will explore the extent to which policies to improve recruitment and retention in nursing are transferable to the AHPs. It is envisaged that as greater attention is given to increasing recruitment and retention for the AHPs, this research will be of particular value in informing and refining policy and employment practice for these groups.

## **Theoretical Framework**

The time scale of this research precluding the tracking of behaviour over time. Consequently, the study used Ajzen's<sup>43</sup> Theory of Planned Behaviour (TPB) as a guiding theoretical framework to examine individuals' intentions to behave in certain ways. The TPB has been successfully used in a range of applied settings associated with recruitment and retention. For example, the TPB has been used to predict nurses' intentions to leave the profession<sup>44</sup> and used to predict nurses' intentions to leave the ward, hospital and the profession.<sup>45</sup> The success of these studies provides strong support for the continuing use of the TPB, in studying intended behaviour in relation to recruitment and retention.

The key elements in the TPB (see Figure 1) are that behaviour can be predicted by intention to perform that behaviour and the extent to which the individual believes they have control over their intention of performing the behaviour (perceived behavioural control or PBC). Ajzen<sup>43</sup> argues that intention is the direct antecedent to performing behaviour, so the stronger the intention to engage in behaviour, the more

likely its performance by the individual and empirical research has supported this assertion.<sup>46</sup> The TPB proposes that there are two further predictive elements of intention. The first is an individuals' attitude towards the behaviour. The second element is the perceived social pressure (e.g. from friends and family) to perform or not to perform the behaviour (subjective norm or SN).

<<<Take in Figure 1 here>>>

In this study the focus is on intention to work for the NHS as a qualified nurse, physiotherapist or radiographer and its antecedents, since the behaviour of joining or returning could not be investigated in the timescale available for conducting the research. Hence four of the constructs in Figure 1 are considered and actual behaviour had to be omitted. In addition, meta analyses of applications of the TPB have reported that attitudes have been frequently found to make significant contributions to the prediction of intentions, whereas the results for subjective norm and perceived behavioural control have been more mixed.<sup>43</sup> Ajzen argues that attitudes toward a behaviour develop from the individuals' beliefs about outcomes associated with performing the behaviour; these are called behavioural beliefs (see Figure 1). Consequently, this study also considers the behavioural beliefs that may influence the attitudes held by potential recruits and returners.

## **Research Objectives**

Using the TPB to guide the investigation the overall aim of this study was to explore the factors that influence potential recruits and returners' intention to work for the NHS in nursing, physiotherapy or radiography. To achieve this aim, the study had four specific research objectives (see Figure 1):

- RO1 To explore the extent to which potential recruits and returners attitudes' influence their intention to work for the NHS as a nurse, physiotherapist or radiographer;
- RO2 To explore the extent to which subjective norm influences potential recruits and returners' intention to work for the NHS as a nurse, physiotherapist or radiographer;
- RO3 To explore the extent to which potential recruits and returners' perceived behavioural control to work for the NHS influences their intention to work for the NHS as a nurse, physiotherapist or radiographer.
- RO4 To identify the behavioural beliefs that influence potential recruits and returners attitudes' toward working for the NHS as a nurse, physiotherapist or radiographer;

## **Method**

The research questions for the study were investigated using data collected by a questionnaire survey. The content of the survey was informed by initial exploratory research conducted by the authors that involved interviews with 231 participants drawn from each of the three groups of interest for the study. This exploratory research is reported in Authors<sup>16,17,18</sup>. Previous relevant studies of the TPB were also reviewed<sup>47,48,49</sup> as was existing research on each of the three professions discussed in the literature review.

Ethical approval for the survey was provided by relevant stakeholders and ethics committees and drafts of the questionnaire were approved by the Department of Health, Policy Research Team. The questionnaire was extensively pretested by lecturers, tutors and students of access and undergraduate courses, school pupils, senior managers from

private and NHS hospitals, and individuals from the independent and agency sectors across the disciplines of nursing, physiotherapy and radiography. In addition, contacts in the Department of Health were also asked to comment on the structure, design and content of the questionnaire. The pretesting proved extremely useful in the development and efficacy of the questionnaire and various suggestions were incorporated into the final version.

### **Questionnaire Design**

The questionnaire was divided into five main sections with each section addressing a particular construct of the TPB. Wherever possible the items used to operationalise each construct were adapted from past research that had applied the theory. All items in the questionnaire used a seven point response format. The individual's answer was given on a seven-point Likert scale for which the responses ranged from strongly disagree, not at all important, or very unlikely to strongly agree, very important, or very likely, depending on the question structure. A summary of the items used is provided in Table 2. All respondents were asked to indicate a profession of interest, either nursing, physiotherapy or radiography and complete the questionnaire with this profession in mind.

<<<Take in Table 2 here>>>

### ***Intention***

Respondents were requested to complete three questions to measure their level of intention to work for the NHS as a qualified member of staff. These questions, following Ajzen's<sup>43</sup> suggestions, asked about the likelihood, plans to, and intention to work for the NHS. Three items were used to assess overall intention, so that this key variable was not assessed by just one question. Factor analysis of responses to these

three items indicated a single factor, and reliability analysis, using the alpha coefficient, showed very strong reliability at 0.93. Therefore these three items were combined to form a single intention measure (I1)

### ***Attitude***

Respondents' attitudes to the NHS were measured by asking them to indicate to what extent they thought working for the NHS as a qualified member of staff would be enjoyable, wise or good. Factor analysis of these three items indicated a single factor and reliability analysis produced a good alpha of 0.86. Therefore the items were combined to form a single attitude measure (A1).

### ***Subjective norm***

Respondents were also asked to indicate what they perceived would be the reactions of their family and friends should they decide to work for the NHS as a qualified member of staff. Two items were used to assess this construct and factor analysis indicated a single factor. The items were combined into a two-item scale (SN1) with an alpha reliability coefficient of 0.79.

### ***Perceived behavioural control***

Two questions were asked about respondents beliefs concerning personal control. Although factor analysis of two three items indicated a single factor the alpha reliability coefficient was only 0.40. Hair et al.<sup>50</sup> state that only alpha values that are over 0.60 are considered acceptable for combining multiple items into a single scale. Consequently, the two items were not combined into one scale and were analysed as individual elements of perceived behavioural control (PBC1 and PBC2).

## ***Behavioural beliefs***

Behavioural beliefs were investigated by asking respondents to indicate what they thought working for the NHS would be like. Sixteen items were used in this section. The item scores were subjected to exploratory factor analysis using principal components analysis with varimax rotation to identify broader themes. Items achieving factor loadings of less than 0.4 were ignored as were single item factors.<sup>50: 385</sup> Four groups (which incorporated 14 of the 16 items) were identified, each of which appeared to be coherent. These were as follows:

1. *Positive Work Features* (BB1) Five items: 'Helping people get better', 'A rewarding career', 'Getting to know patients', 'Working as part of a team', and 'Having variety in my work'. The alpha internal reliability for this scale was 0.77.
2. *Employer Fairness* (BB2) Three items: 'Working where there are clear policies on gender equality', 'Working where there are clear policies on race equality', and 'Having a secure job'. The alpha coefficient was 0.70.
3. *Work Intensity* (BB3) Three items: 'Working somewhere that is understaffed', 'Working under a lot of pressure', and 'Working for low pay' The alpha coefficient for this group of items was 0.66. All items were negatively worded, so that a high score indicates negative perceptions.
4. *Work Endurance* (BB4) Three items: 'Having to work long hours', 'Having to work unsociable hours' and 'Having to deal with abusive patients'. The alpha coefficient for this group of items was 0.63. These items were also negatively worded, so that a high score indicates negative perceptions.

The four factors were interpreted using the insights generated from the first exploratory

stage of the study. Positive Work Features (BB1) was relatively easy to interpret based on the items loading heavily on that factor. We interpreted Employer Fairness (BB2) as the perceived equality of the organisation and whether the respondents felt that the NHS would be a trustworthy employer. Work Intensity (BB3) is the pressure and fast paced nature of the NHS working environment (due to understaffing). From the stage one interviews, low pay was frequently mentioned in relation to pressure. These comments were often in terms of perceptions of low pay considering the level of pressure that NHS staff are put under. Finally, we conceptualised Work Endurance (BB4) as referring to the daily grind that health professionals experience and the high demands placed on them.

### ***Demographics***

A further section categorised respondents' backgrounds in terms of sample groups and their areas of interest within healthcare. Respondents were also requested to provide information about their background such as their gender, marital status, age and ethnic background, and provided the opportunity for respondents to make any additional comments about the research.

### **The Sample**

Several sources were used to distribute the questionnaire survey. The majority of questionnaires were distributed to people who had contacted the NHS Careers Help Line and had agreed to be contacted again. Further quantities of questionnaires were distributed from university training schools, professional associations and from agency employers. In total 4969 questionnaires were distributed and 1125 useable questionnaires returned, giving a response rate of 23%.

Table 3 shows the demographics of the respondents and profession of interest. The majority of respondents were female, 87% with 13% male. Given the predominantly female bias of the existing healthcare workforce this bias was not unexpected. Nursing was the most common profession of interest, 56%, with 31% interested in physiotherapy and 14% in radiography. The age of respondents ranged from 16 to 64 with 75% of the sample under 40 years of age.

<<<Take in Table 3 here >>>

## **Results**

### **Intention**

The mean score across the three questions that made up the intention scale was 5.01, (1 being a very weak intention and 7 being a very strong intention) with a standard deviation of 1.93. On average respondents showed a moderately strong intention to work for the NHS as a nurse, physiotherapist or radiographer. The spread of scores is quite large, which signals that while some people had a very strong intention to work for the NHS, some had a very weak intention.

### **Attitude**

The mean score across the three questions that assessed attitude was 5.14, with a standard deviation of 1.23. Again, this suggests a moderately positive attitude on average toward working for the NHS as a nurse, physiotherapist or radiographer. The spread of scores is again quite large, but less so than for intention. It may well be the case that a wider range of factors influences intention than attitude. The correlation

between attitude and intention is 0.48<sup>\*\*</sup>. As one would expect, it appears that the more positive a person's attitude, the more likely they are to intend to work for the NHS.

### **Subjective Norm**

The mean score for this construct was 5.18 with a standard deviation of 1.43. This indicates that on the whole there was fairly strong social approval for the idea of working for the NHS. The extent to which respondents believed there was social approval for them working for the NHS was highly correlated with their intention (0.37<sup>\*\*</sup>) towards doing so. This correlation is notably high and suggests that the opinions of family and friends have considerable impact on the probability that a person will seek to work for the NHS as a qualified nurse, physiotherapist or radiographer.

### **Perceived Behavioural Control**

The mean score for PBC1, the 'confident I could work for the NHS' question was 5.89, with a standard deviation of 1.52. Corresponding scores for PBC2, the negatively worded 'difficult for me to work for the NHS' question were 2.62 (mean) and 1.85 (standard deviation). On average the respondents felt quite a high sense of personal control over working for the NHS - they were quite confident they could do so, and anticipated few difficulties. PBC1 had a correlation of 0.23<sup>\*\*</sup> with intention. The corresponding figure for PBC2 was -0.09<sup>\*\*</sup>. These correlations indicate a relatively weak connection between personal control and intention.

### **Behavioural Beliefs**

When analysing the beliefs that may influence attitude, we decided to first consider each of the variables separately, in terms of the mean scores for each variable and their individual correlations with attitude. Taking this approach enables more detail

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<sup>\*\*</sup> p-value <0.01

to be shown about possible individual associations between particular variables before considering the broader themes identified from the factor analysis reported earlier and their relative influence over attitude. The assessment of relative importance is addressed through regression analysis presented in the following section.

The means and standard deviations for respondents' perceptions of working for the NHS as reflected in each of 16 variables are shown in Table 4. The items are arranged in descending order of endorsement. It is immediately evident that some perceptions of working for the NHS as a qualified nurse, physiotherapist or radiographer were strongly and almost universally held. 'Working as part of a team', 'Helping people get better', 'Working under a lot of pressure' were the strongest perceptions of working in the NHS held by respondents. Other strong perceptions included working somewhere with job security and clear policies on equality, and having a rewarding career. Respondents' expectations of working for low pay were moderate, and perhaps less strong than might be expected given the prominence of pay as an issue in the political, employment relations and media arenas.

<<<Take in Table 4 here >>>

Regarding the correlations (Table 4) it can be seen that a range of perceptions of work are associated with attitude towards working in the NHS as a nurse, physiotherapist or radiographer. The perceptions of working in the NHS that were most strongly connected to attitude were 'a rewarding career', 'helping people get better' 'working as part of a team' and 'getting to know patients'. This indicates that individuals' attitudes are related to the people focused aspects of the work as well as their longer-term career, rather than issues such as pay or the hours worked.

## **Predictors of Intention**

In order to further explore the four research objectives, six multiple regression analyses were conducted. These analyses followed the logic of the model of the TPB shown in Figure 1. The results of these analyses are provided in Table 5.

<<<Take in Table 5 here>>>

Table 5 shows that the strongest predictor of intention to work for the NHS for the total sample was the extent to which people held a positive attitude about NHS work in one of the three professions of interest (RO1). These attitudes were in turn most influenced by the extent to which people perceived that NHS work as a qualified nurse, physiotherapist or radiographer offered positive features (BB1) i.e. a chance to help people and to get to know them, having a rewarding career and teamwork (RO4). By contrast, perceptions of Work Intensity (BB3) only had a moderate association with attitude, and the other two behavioural beliefs, Employer Fairness (BB2) and Work Endurance (BB4), had even weaker associations. Subjective norm (the opinions of others) also seems to matter for intention (RO2), although not as much as peoples' attitudes. The more positive others' opinions, the more positive the person tends to be about working for the NHS. In addition, both perceived behavioural control items have a statistically significant association with intention, although this association is weak for both items (RO3).

The multiple regression analyses suggest that, for the total sample, peoples' perceptions of positive work features are closely associated with peoples' attitudes, which in turn appear to influence their intentions. However, even when attitudes have been taken into account, subjective norm and both perceived behavioural control items

continue to be important. In other words, the opinions of others matter as does belief in one's ability to secure an NHS job.

### **Comparisons Between Professions**

Of the 1125 respondents, 35 did not choose either nursing physiotherapy or radiography as their profession of interest and these respondents were excluded from the profession specific analysis. Mean values were calculated in order to compare the three professions on each of the variables shown in Table 6. These results suggest that respondents who were interested in nursing had somewhat more positive attitudes and intentions than those interested in an AHP. The nursing respondents also reported considerably more support from other people for their interest than the other professions (subjective norm). The nursing respondents also anticipated slightly more difficulty in getting an NHS job than the other professions.

<<< Take in Table 6 here >>>

The findings suggest that nursing tends to be seen somewhat differently from the two AHPs, but there are also some differences between physiotherapy and radiography. It appears that physiotherapy is seen as having considerably less long hours and abusive patients (Work Endurance, BB4) than either nursing or radiography. A rather similar pattern was observed for radiography concerning positive work features (BB1). The radiography respondents saw fewer positive features of the work than the nursing and physiotherapy respondents.

When examining the regression analyses conducted for each profession, shown in Table 5, a number of further observations can be made. For all three professions, attitude is consistently the largest predictor for intention, and for radiography its influence appears to be particularly strong. In line with the findings for the total

sample, respondents' attitudes in all three professions appear to be influenced by the extent to which they perceive they will encounter positive work features (BB1) by joining or returning to the NHS. Work Intensity (BB3) is a discourager to all three professions, but is outweighed by positive work features (BB1). The sense of perceived control that respondents have seems to have a weak influence on intention for both nursing and radiography and very little influence for respondents thinking about physiotherapy. For potential recruits and returners to physiotherapy, the views of their family and friends (SN1) seem to be more important than control issues. The views of family and friends also appear to have some influence for people interested in nursing, but this is not the case for radiography with the results suggesting that the opinions of family and friends have little impact on individuals' intentions to work for the NHS as a radiographer.

## **Discussion and Conclusions**

This paper has investigated the relative importance of variables that influence the intention of potential recruits to nursing, physiotherapy and radiography to work for the NHS. The study has adopted Ajzen's theory of planned behaviour as a theoretical framework which allows a number of observations to be made.

It appears that people's attitude towards working for the NHS as a nurse, physiotherapist or radiographer is largely, though not wholly, determined by their beliefs about the consequences of doing so. A person's attitude towards working for the NHS in one of the three professions is a substantial predictor of intention, but by no means the only one. People's beliefs about the opinions of others seem to influence intentions to work for the NHS indicating that subjective norm is important. Perceived behavioural control was also correlated with intention after other factors have been

taken into account.

The findings allow a number of comments to be made about the relative importance of variables influencing potential recruits' attitude and intention towards working for the NHS as a nurse, physiotherapist or radiographer. Firstly, the more positive a person's attitude, the stronger their intention to work for the NHS as a nurse, physiotherapist or radiographer (RO1). Secondly, the extent to which a person believes that the behaviour of working for the NHS as a nurse, physiotherapist or radiographer will lead to them experiencing positive work features appears to be closely associated with their attitudes (RO4). Thirdly, the extent to which a person believes that people close to them approve of them working for the NHS (i.e. subjective norm) is associated with their intention to do so (RO2). However, subjective norm predicts intention less strongly than attitude. Fourthly, elements of perceived behavioural control also predict intention. The more that people see difficulties and lack confidence about being able to get an NHS job, the less their intention (RO3).

The findings also allow a number of comments to be made about the relative importance of variables between the three professions of interest. Firstly, respondents who completed the questionnaire with nursing as their profession of interest had more positive attitude and (especially) intention to work for the NHS than those with physiotherapy or radiography as their profession of interest. They also reported more approval from friends and family. Secondly, respondents who completed the questionnaire with physiotherapy in mind perceived that NHS work would be easier to endure than those who had nursing or radiography in mind. Thirdly, those who completed the questionnaire with radiography as their profession of interest perceived fewer positive features of NHS work than those with nursing or physiotherapy in mind.

Fourthly, respondents who had radiography in mind as a career did not appear to be influenced by the opinions of their family and friends, unlike those respondents interested in nursing or physiotherapy.

There are also some more optimistic aspects to our findings, from an NHS point of view. The first is that on the whole our respondents seemed to have positive perceptions of the extent to which working for the NHS as a nurse or AHP would offer them a rewarding career. Another relatively optimistic finding from an NHS management point of view is that pay, although an issue, did not seem to be the main one. This is broadly consistent with other research concerning nursing and the AHPs, although some of that other research<sup>22</sup> does place slightly higher emphasis on pay than our results do.

Previous work has indicated that social contacts, particularly friends and family, play a significant role in a person's decision to enter health-related professions.<sup>11</sup> Our work has taken this general line of enquiry further by clearly demonstrating that people's perceptions of the opinions of friends and family are associated with their intention to enter (or not) the NHS as a qualified nurse or physiotherapist, but have less influence over people considering becoming a qualified radiographer. This lack of influence may be because both nursing and physiotherapy are more visible healthcare careers than radiography. It has been reported that radiography continues to suffer from a poor professional image<sup>41</sup> and as such people interested in radiography may feel that their family and friends do not know enough about the role to be able to impart useful advice or views. However, the general importance of the views of friends and family for the total sample is a significant finding, which shows that the role of other people in the decision-making process includes normative pressure as well as information-giving.

It is of course something of a cliché to say that people enter healthcare jobs (in the NHS or elsewhere) because they want to help others - but cliché or not, people do say it.<sup>32,51</sup> Our findings take this a step further in showing how very strong the expectation of helping people (and getting to know them) is amongst these potential recruits and returners. Furthermore, the opportunity to do this (and to work as part of a team) is very important. This implies that things that appear to impede staff members' opportunities to work as part of a team and to help people get better (such as understaffing) are likely to have a significant dampening effect on the enthusiasm of potential recruits and returners.

There is also a danger that recent developments in the NHS in the form of possible redundancies may serve to undermine some of the important factors contributing to the attractiveness of the NHS as an employer. Several NHS Trusts have announced the need to cut jobs in order to save money or manage debts<sup>52</sup> although it has been suggested that these cuts would be mainly among temporary or agency staff or in the form of recruitment freezes.<sup>53</sup>

Our results have shown a person's attitude towards working for the NHS is closely associated with their intention to actually do so. Peoples' attitudes in turn, are formed by expectations of what they perceive to be the outcome of choosing to follow a particular course of action (their behavioural beliefs). While our respondents were not surveyed in the current climate of job cuts within the NHS, both having a secure job and working somewhere that is understaffed were both identified as being strong perceptions of the NHS and likely to contribute to the behavioural beliefs a person forms. Although we are extrapolating slightly, it would seem reasonable to expect that the impact of redundancies among nursing and allied health profession staff would

cause perceptions of job security within the NHS to fall and perceptions of understaffing to increase, thereby having a negative impact on attitudes held towards the attractiveness of the NHS as an employer.

Research in Canada, investigating the retention of nurses, argues that the large scale downsizing and layoffs that took place in the Canadian healthcare system in the 1990s, due to economic constraints and reduced funding, led to increased workloads and pressure on the remaining nursing staff. As a result of these increased workloads many nurses chose to immigrate to other countries or simply quit. It is argued that the conditions resulting from the restructuring made nursing as a career choice less attractive to young women and men.<sup>54</sup> Ironically, Canada, like the NHS, is now experiencing serious nursing shortages.<sup>55</sup> The lesson from Canada would suggest that should the NHS respond to funding shortages with redundancies, this may well have a detrimental impact on the long term ability of the NHS to recruit and retain nurses and allied health professionals.

## **Concluding Remarks and Limitations**

The broad message, for all target groups, from this study's findings is the need to enhance desired positive features of NHS work, as well as addressing the features which are seen as unattractive or sources of dissatisfaction. These features are interrelated in that, for example, reducing understaffing, not only reduces unattractiveness and dissatisfaction, but also enhances some facets of positive work features e.g. more time to spend with patients in delivering a 'professional' service. However, the 'Catch 22' for the NHS is that reducing understaffing will inevitably require greater patient throughput to reduce waiting times and lists. This is understandable in a service with increasing demands. However, existing and potential

staff are indicating that some attempt at balancing this dilemma is required if they are to join the NHS, and stay in it. The concern is that the impact of redundancies within the NHS may simply serve to exacerbate the current sources of dissatisfaction, such as understaffing, as well as undermining existing positive features of NHS work, such as job security.

The findings of this study are, however, subject to a number of limitations. Firstly, the data are drawn from respondents who have already expressed some level of interest in becoming a nurse, physiotherapist or radiographer in the NHS. These respondents may therefore, not be representative of the wider general population. Secondly, for reasons of practicality the study used physiotherapy and radiography as proxies for the AHPs as a whole. As a result of this approach, there may be profession specific issues influencing career choice decisions for other AHPs that have not been captured by this study.

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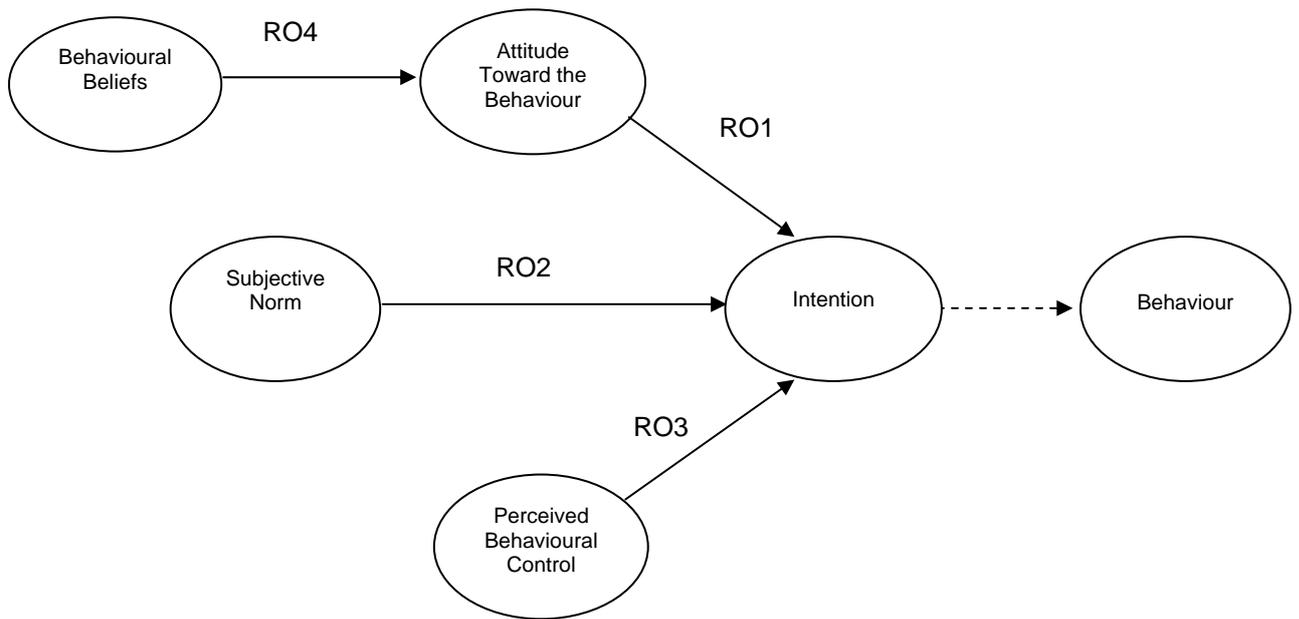
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**Figure 1: The Theory of Planned Behaviour and Associated Research Objectives**



**Table 1: Groups Surveyed and Number of Respondents**

Groups Surveyed	Number of Respondents
1. Young people undertaking relevant courses of education consistent with nursing or AHP work.	47
2. Mature people who are returning to work or seeking career change (e.g. undertaking Open University courses in health and social care.).	54
3. Students in training for nursing or AHPs.	203
4. Students in Higher Education	70
5. Individuals working in the NHS but not in nursing/AHPs	25
6. NHS Assistants	111
7. Those working through nursing or AHP agencies.	92
8. Individuals working for 'competitor' employers such as independent sector organisations e.g. private sector healthcare.	168
9. Individuals working in professions other than nursing or the AHPs, or not currently economically active.	312
10. Individuals working in the NHS and qualified	43
<b>Total</b>	<b>1125</b>

**Table 2: Variables Used in Questionnaire**

Construct	Number of Items	Factor (Variables)	Variables in Factor	
Intention	3	1 (3)	My working for the NHS as a qualified member of staff is...very unlikely/very likely	I1
			I plan to work for the NHS as a qualified member of staff.	
			I intend to work for the NHS as a qualified member of staff.	
Attitude	4	1 (4)	My working for the NHS as a qualified member of staff would be...not enjoyable/enjoyable	A1
			My working for the NHS as a qualified member of staff would be...wise/unwise	
			My working for the NHS as a qualified member of staff would be...good/bad	
Subjective Norm	2	1 (2)	Most of my family and/or friends probably think that I should work for the NHS as a qualified member of staff.	SN1
			If I worked for the NHS as a qualified member of staff, most of my family and/or friends would be proud.	
Perceived Behavioural Control	2	0 (2)	I am confident that I could work for the NHS as a qualified member of staff if I wanted to	PBC1
			It would be difficult for me to get a job in the NHS as a qualified member of staff	PBC2
Behavioural Beliefs	16	4 (5, 3, 3, 3)	Helping people get better	BB1
			A rewarding career	
			Getting to know patients	
			Working as part of a team	BB2
			Having variety in my work	
			Having a secure job	
			Working where there are clear policies on gender equality	BB2
			Working where there are clear policies on race equality	
			Working for low pay	BB3
			Working somewhere that is understaffed	
			Working under a lot of pressure	BB4
			Having to work long hours (e.g. well over 37 hours per week)	
			Having to deal with abusive patients	
Having to work unsociable hours (e.g. nights)	Dropped			
Having the freedom to choose the hours I work				
A lack of promotion opportunities	Dropped			

**Table 3 Demographics of Respondents**

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<b>Sex</b>		
	Males	979 (87%)
	Females	146 (13%)
<b>Age</b>		
	10-19	225 (20%)
	20-29	349 (31%)
	30-39	281 (25%)
	40-49	146 (13%)
	50-59	68 (6%)
	60-69	11 (1%)
<b>Profession of Interest</b>		
	Nursing	609 (54%)
	Physiotherapy	337 (30%)
	Radiography	144 (13%)

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**Table 4 Perceptions of Working for the NHS**

	<b>Mean</b> (Min = 1; Max = 7)	<b>SD</b>	<b>Correlation with Attitude</b>
Working as part of a team	6.39	(0.96)	0.40**
Helping people get better	6.26	(0.97)	0.41**
Working under a lot of pressure	6.11	(1.11)	-0.08*
Working where there are clear policies on race equality	5.99	(1.19)	0.22**
A rewarding career	5.91	(1.34)	0.62**
Having a secure job	5.87	(1.20)	0.15**
Working where there are clear policies on gender equality	5.85	(1.25)	0.29**
Having variety in my work	5.76	(1.24)	0.31**
Working somewhere that is understaffed	5.71	(1.49)	-0.23**
Getting to know patients	5.60	(1.41)	0.39**
Having to deal with abusive patients	5.45	(1.32)	0.06
Having to work unsociable hours (e.g. nights)	5.23	(1.88)	0.14**
Having to work long hours (e.g. well over 37 hours per week)	5.13	(1.72)	0.06
Working for low pay	4.93	(1.68)	-0.27**
A lack of promotion opportunities	3.88	(1.61)	-0.26**
Having the freedom to choose the hours I work	3.13	(1.70)	0.20**

\*\* . Correlation is significant at the 0.01 level (2-tailed)

\* . Correlation is significant at the 0.05 level (2-tailed)

**Table 5: Predicting Intention to Work as a Nurse, Physiotherapist or Radiographer in the NHS – Regression Analyses Results**

Research Objectives	Independent Variables	Dependent Variable	Beta Weights			
			Total Sample n = 1125	Nursing n = 609	Physiotherapy n = 337	Radiography n = 144
RO1, RO2, RO3	A1	I1	0.38***	0.26***	0.37***	0.61***
	SN1		0.20***	0.17***	0.23***	0.00
	PBC1		0.10***	0.16***	0.08	0.18*
	PBC2		-0.12***	-0.14**	-0.13*	-0.23**
RO4	BB1	A1	0.53***	0.44***	0.56***	0.60***
	BB2		0.03	0.11*	-0.01	-0.02
	BB3		-0.25***	-0.22***	-0.26***	-0.20**
	BB4		0.12***	0.04	0.06	0.10

\*\*\* = statistically significant at p<.001

\*\* = statistically significant at p<.01

\* = statistically significant at p<.05

**Table 6: Means for Each Profession of Interest**

Construct	Nursing	Physiotherapy	Radiography
Intention (I1)	5.39	4.66	4.15
Attitude (A1)	5.49	4.77	4.59
Subjective Norm (SN1)	5.65	4.60	4.50
Confident could get NHS job (PBC1)	5.81	5.94	6.20
Difficult to get NHS job (PBC2)	3.01	2.15	2.08
Positive Work Features (BB1)	6.17	5.85	5.45
Employer Fairness (BB2)	5.97	5.83	5.85
Work Intensity* (BB3)	5.48	5.68	5.81
Work Endurance* (BB4)	5.69	4.40	5.62

Notes:

All constructs measured on a 1-7 scale

\* Negatively worded so high score indicates negative perceptions.