Introduction – There are intrinsic and extrinsic factors that influence physiotherapists’ participation in continuing professional development (CPD). A number of benefits of and barriers to CPD participation are identified in the literature, but relatively little is known about factors that influence attitudes towards continued learning. The aim of this study was to identify factors influencing UK physiotherapists’ attitudes towards CPD, with a focus on career point and type of employment, in the context of motivational theories.

Methods – An online questionnaire consisting of likert style questions was used to collect data from UK physiotherapists. Nominal and ordinal data were analysed to determine differences between subgroups within the dataset.

Results – 205 physiotherapists completed the online questionnaire. Physiotherapists were generally internally motivated towards CPD, but attitudes were influenced by career point, and whether physiotherapists worked in the National Health Service (NHS) or in the private sector. External factors appeared to have a negative effect on motivation towards CPD.

Discussion – Differences in attitudes at different points on the career path suggests that organisational structure may impede lifelong learning at some stages in career progression, while differences between those working privately and in the NHS may potentially reflect organisational differences between these types of employment.

Implications for Practice – individual attitudes towards CPD are affected by a number of factors and employers should strive to encourage engagement, while recognising the different drivers within different types of employment and at different career points. By increasing physiotherapists’ engagement with CPD, patient experience of care and best practice will improve.
Physiotherapists’ reported attitudes and perceived influences to their continuing professional development – results of an online questionnaire.

Factors influencing attitudes to CPD

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Abstract

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Introduction

There is a long history of continuing professional development (CPD) within physiotherapy, with mandatory CPD having been part of physical therapy registration in some states in the USA since 1981, and in 33 states since 2011 (Federation of State boards of Physical Therapy, 2011). In Canada, regulation of physiotherapists and their CPD is controlled by individual provinces and territories (International Network of Physiotherapy Regulatory Authorities, 2015). Mandatory CPD is part of reregistration in Australia (Physiotherapy Board of Australia, 2015), South Africa (Health Professions Council of South Africa, 2008) and recertification in New Zealand (The Physiotherapy Board of New Zealand, 2012).

In the UK, the Health and Care Professions Council (HCPC) introduced mandatory audit of CPD for physiotherapists in 2010 (HCPC, 2014). This biannual audit process involves 2.5% of registered physiotherapists in the UK being asked to submit their CPD portfolio. There are no specific guidelines in terms of the number of hours of CPD, but there must be evidence of CPD activity at least every three months, and CPD must meet the HCPC standards for CPD (HCPC, 2018).

In the context of UK health and social care, several factors continue to drive the need for CPD, including the new service model set out in the Long Term Plan (National Health Service (NHS), 2019), the new five-year General Practitioner (GP)
contract which will recruit 22,000 multidisciplinary staff, including physiotherapists, to work alongside GP’s to provide first contact interventions (Millet, 2019), and the drive for a digital workforce, which will require physiotherapists to develop skills to support and evaluate the use of validated smartphone apps and the integration of artificial intelligence, robotics and virtual reality into rehabilitation (The Topol Review, 2019).

Motivation to undertake CPD can be internally driven by perceived benefit or internal reward of the learning (Festinger, 1964), perceived ability of the self as a learner (Ryan and Deci, 2017) and to be able to undertake the specific learning tasks (Cassidy and Eachus, 2000), as well as the perceived level of control over learning, or internal locus of control (Cassidy and Eachus, 2000). From an external perspective, motivation can be increased if there is likely to be an external reward (Festinger, 1964; McClelland, 1985; Ryan and Deci, 2017), but external motivation can also be influenced by organisational policy, working relationships, status within the organisation and security of role (Herzberg, 1968), and by the quality and flexibility of the learning provision (Kantar, 2018). Porter and Lawler (1968) proposed that actions are eventually influenced by a balance between the perceived value of the reward (either internal or external) and the effort required to attain the reward.

Published research on CPD has highlighted benefits of and barriers to CPD in physiotherapy (Cole et al, 2008; French, 2006; Gunn and Godling, 2009; Johnson, 2008), and generally attitudes towards CPD in healthcare professionals is reported...
positively in the literature (Bell et al, 2002; Keim et al, 2001; Moons et al, 2012; Sturrock and Lennie, 2009) but none of these studies identified whether there was any variance in responses, in terms of benefits, barriers or attitudes, across different subgroups of physiotherapists, such as at different points on the career ladder, or in different types of roles.

The aim of this study was to investigate factors influencing UK physiotherapists’ attitudes to CPD, with a focus on the influence of career point and type of employment, in the context of motivational theories. This study formed part of a larger exploratory research project at PhD level. Ethical approval was received from the University of Central Lancashire STEMH Ethics Committee (reference number STEMH 586).

Methods.

An online questionnaire was used to be able to collect data from a large sample of UK physiotherapists. The questionnaire was designed using the Snap 11 Professional online questionnaire software. The questionnaire was piloted with two physiotherapists and the final version was refined according to their feedback. The questionnaire collected demographic information about the participant, including gender, age, length of time qualified as a physiotherapist and physiotherapy related qualifications. It also collected employment data, in terms of primary employment type, the number of other physiotherapists and AHP’s the participant worked with daily, job banding, and percentage of time spent in clinical, managerial, educational or research activities. The next section of the
questionnaire asked about CPD activity, perceived benefits and barriers to CPD, and attitudes towards CPD. The attitudinal questions provided statements which were ranked on 6-point likert scales, ranging from strongly agree to strongly disagree.

**Sample.**

Participants for the questionnaire were recruited from physiotherapists in the UK between May and July 2017. The aim was to recruit from across a range of physiotherapy employment sectors in the UK, in order to gain as diverse a population of responders as possible.

Emails were sent to 158 National Health Service (NHS) physiotherapy service managers across the UK (England, Wales, Scotland and Northern Ireland), whose details had either been retrieved from Oscar Research, via the UCLan Marketing Department or had been obtained through calling the Trusts directly to ask for contact information. The email asked managers to circulate the email, including the link to the survey, to their staff. The email included an information sheet about the study, which included contact details for the primary researcher if participants had any questions about the survey before completing it. It was not possible to gain contact information for 36 NHS Trust physiotherapy managers. Private providers across the UK were identified via the PhysioFirst website (http://www.physiofirst.org.uk ). All contacts (n=1910) retrieved from the website were emailed directly, inviting them to participate in the online questionnaire. Only 11 emails were returned as undeliverable, two were returned with automatic replies
for maternity leave, and one responded to say that she had retired. No reminder emails were sent.

Since it is impossible to know how many NHS managers distributed the email to their staff, and due to lack of control over the email addresses obtained for private practitioners, the number of actual recipients of the link to the questionnaire is uncertain. All physiotherapists who responded to the survey were deemed to have given consent for their anonymised responses to be used in the study.

Measures.

To develop the questionnaire, relevant surveys from the literature were reviewed, and questions created based on those used in previous research as well as items specifically relevant to this study. Demographic and employment information was collected to be able to compare across different career points and employment types within sample. An even number of response choices were chosen for Likert scales, to avoid participants being able to sit on the fence, which can potentially lead to collection of inaccurate information (Raajmakers, et al, 2000). Six-point, evenly balanced scales were used, to try to determine strength of opinion as well as direction of it (Burns and Burns, 2008), and to minimise the bias that was seen in the literature reviewed (Advani et al, 2014; Mubuuke et al, 2010).

Analysis.

Demographic and employment data were analysed descriptively to gain an overview of the different subgroups of the population of respondents. The full
dataset was analysed in order to gain insights from both within group and between group responses.

The likert question responses were then analysed to compare the following categories – NHS versus privately employed physiotherapists (PP), and respective job banding. Nominal data were analysed using the Chi-squared test, and the ordinal data from the 6-point likert scales were analysed using a Mann Whitney U test for comparison of NHS and privately employed physiotherapists’ responses. A Kruskal Wallis test was used to compare the ordinal data from the 6-point likert scales by banding, with significant results analysed using a post-hoc Mann Whitney U test to identify where differences occurred. All data analysis used SPSS Statistics 24 package. A p-value of <0.05 was accepted as significant.

Results

Two hundred and five physiotherapists completed the online questionnaire, representing 0.5% of the total registered physiotherapy population (HCPC, 2015). Eighty-five percent of the sample were female, compared with 77% of the overall UK physiotherapy population (HCPC, 2014). Fifty-two percent of the sample were aged between 22 and 35, with the average age of all HCPC registered UK physiotherapists being 38 (HCPC, 2014). The majority of the sample classed their role as being primarily clinical (70%).

The sample were divided into two groups depending on employment type. Eighty-three percent of the participants worked in the NHS (n=171) and 15% worked in
private practice (n=31). Participants were also divided into five groups depending on their job banding. In the UK, NHS jobs are banded by level of experience and expertise, with newly qualified physiotherapy graduates entering the workforce at band 5. Bands 6 and 7 reflect greater levels of experience and responsibility, with Bands 8a and 8b often being consultant or managerial level posts. Twenty-seven of the private practitioners did not include information about grade or banding and so it was not possible to include them in these calculations, which may have skewed the results. There were five groups – band 5 (n=33), band 6 (n=74), band 7 (n=48), band 8a (n=17), band 8b (n=5).

Demographic data is provided in Table 1. Those working in PP were older and had been qualified longer than those working in the NHS.

**UK physiotherapists’ reported CPD activity**

The amount of CPD undertaken by the full sample, NHS and PP physiotherapists is shown in Figure 1. When considering the full sample, physiotherapists in the UK had completed varying amounts of CPD, ranging from none to more than 26 hours in the last month. Comparing the NHS and PP physiotherapists, there was no significant difference in the amount of CPD undertaken in the last month (p=0.09), but when comparing by career point, there was a significant difference between the groups, with those in band 8a posts having completed significantly more CPD than either band 6s or band 7s (Kruskal Wallis test, p=0.043; post hoc Mann Whitney U test, 6 vs. 8a p=0.022, 7 vs. 8a p=0.004) (see Figure 2). There were no significant differences between any other bands.
The participants were asked to consider 10 benefits and 10 barriers identified from the research (see Figure 3), and to answer yes if they thought these were benefits or barriers for them personally. Overall, more benefits of CPD were identified by the respondents (mean 7.84, median 8, range 3-10), than barriers to CPD (mean 4.74, median 5, range 0-10).

There were no significant differences between the NHS and PP physiotherapists in terms of the number of benefits of CPD identified (p=0.557), but there were significant differences in identified barriers, with the NHS physiotherapists identifying significantly more barriers than those working in PP (p=0.006). While PP physiotherapists reported being an isolated worker a barrier significantly more than NHS physiotherapists, the NHS physiotherapists reported a lack of protected time, a lack of employer support, lack of cover for time out of work to attend CPD activities, patient care prioritised over CPD and employer financial constraints were barriers significantly more than PP physiotherapists.

There were no significant differences in the number of benefits of CPD identified by the different grade bandings (p=0.059), but there was a significant difference in the number of barriers to CPD identified by the different groups (p=0.028). On post hoc analysis, band 5 and 6 physiotherapists identified significantly more barriers than those at band 8a (p=0.020 and p=0.004 respectively), and band 6s identified significantly more barriers than those in band 8b posts (p=0.048). When analysing specific questions, more junior staff felt that patient care being prioritised over
CPD, and a lack of information regarding CPD opportunities were barriers significantly more than senior staff.

**UK physiotherapists’ attitudes to CPD**

The percentages of positive and negative responses to the 6-point likert statements on attitudes to CPD, as well as statistical analysis comparing between NHS and PP physiotherapists are shown in Table 2. On analysis, responses from the full sample were positive, with physiotherapists being motivated to undertake CPD (93%), feeling that there is value in undertaking CPD (92%), considering CPD to be worthwhile (96%) and seeing CPD and lifelong learning as part of what it means to be a professional (99%). Despite this, nearly half of respondents still thought that CPD is a chore (43%). Although 94% of the sample felt that they had improved patient outcomes by undertaking CPD, 43% considered it difficult to implement changes generated from CPD into their practice.

In terms of attitudes towards CPD, there were statistically significant differences between NHS and PP physiotherapists on four of the 20 questions asked. Physiotherapists working in private practice were significantly more motivated to undertake CPD (p=0.023) and gained more enjoyment and job satisfaction from CPD (p<0.001 and p=0.046 respectively). Those working in the NHS found it significantly more difficult to implement changes generated from CPD into their practice (p=0.002).
There were statistically significant differences in attitudes between the physiotherapists on different job bandings on 12 of the 20 questions (see Table 3). When considering this data, band 6 respondents were significantly less sure what constituted CPD than those at bands 7 and 8a, and band 6 respondents were also significantly less motivated to undertake CPD than bands 5 and 8a. Band 6 physiotherapists felt that CPD was a chore significantly more than bands 8a and 8b, while bands 5 and 7 felt it was more of a chore than those in band 8b positions. Bands 6 and 7 both felt that CPD was less worthwhile than those in bands 8a and 8b. Band 8b physiotherapists felt there was value in CPD significantly more than those at bands 6, 7 or 8a. Band 6 physiotherapists also felt that the culture of physiotherapy did not value CPD significantly more strongly than bands 5, 7 and 8b physiotherapists, that they should only have to undertake CPD if there was opportunity for progression significantly more and that professional status could not be maintained without CPD significantly less than those at bands 8a and 8b. They also felt that they could maintain their professional competence without CPD significantly more than bands 5 and 7, but found it significantly more difficult to implement changes from CPD into practice than those is bands 7 and 8b. Band 5 and 6 physiotherapists felt that they did more CPD because of the threat of HCPC audit than those at band 8a and 8b, and that employer support for CPD had improved since the introduction of CPD audit significantly more than bands 7 and 8a.

Discussion
Factors influencing physiotherapists’ CPD activity and attitudes to CPD

Significant differences were found in terms of the barriers to CPD between NHS and privately employed physiotherapists. These reflect findings from previous research in terms of NHS physiotherapists’ identified barriers (Johnson, 2008; Gunn and Godling, 2009; Haywood et al, 2013). The NHS had over 100,000 staff vacancies in 2018 (Nuffield Trust et al, 2018), increasing pressure on staff to provide a quality service with reduced resources, and it is therefore unsurprising that NHS physiotherapists found limited time for CPD, and lack of cover for time out of work to attend CPD activities were barriers. Equally, with the increased requirement for mandatory and core skills training (Skills for Health, 2018), NHS staff time is used to meet the requirements of annual appraisals, rather than on developmental learning. Many of the barriers identified were external organisational influences, reflecting the negative impact of Herzberg’s (1968) hygiene factors.

Physiotherapists working in the private sector also appear to have more positive attitudes towards CPD than those working in the NHS, being more motivated to undertake CPD, and gaining more enjoyment and job satisfaction from it. This is reasonable, given the autonomy of the work environment and therefore the ability to choose and undertake CPD as and when it is appropriate, in comparison with those working in the NHS, where CPD may be driven by service need rather than personal desire, as is reflected in the Chartered Society of Physiotherapy (CSP) CPD standard relating to employer policies (CSP, 2013). The ability to take
responsibility for learning choices, in terms of when and what to learn, suggests a strong sense of personal agency (Ryan and Deci, 2017) as well as an internal locus of control (Cassidy and Eachus, 2000), displayed more strongly by those physiotherapists working in PP. Having said this, there was no significant difference in the amount of CPD undertaken by the two groups in the last month, suggesting that, despite the potential for a negative impact of external barriers to CPD, physiotherapists remain internally motivated to continue their development (Herzberg, 1968), and the study found that physiotherapists see lifelong learning as part of what it means to be a professional, suggesting desire for personal betterment (Kantar, 2018) and recognition of the internal value of learning (Festinger, 1964; Ryan and Deci, 2017).

Junior staff (bands 5 and 6) identified more barriers to CPD than those of higher grades. Study results showed that staff in lower bands have a higher percentage of clinical workload (means by band – 5=84%, 6=78%, 7=64%, 8a=38%, 8b=14%) which explains this finding, since the majority of barriers related to patient prioritisation over CPD.

Band 6 physiotherapists had significantly less positive attitudes to CPD than any other bands. This appeared to be in relation to internal factors (e.g. motivation, enjoyment, value), as well as external factors (e.g. professional culture, implementing change into practice, and drivers for undertaking CPD). One possible explanation for this is the position of band 6 physiotherapists in the hierarchical structure of the profession. For newly qualified physiotherapists (band 5), CPD
usually focusses on developing their clinical skills, while for more experienced staff (bands 7-8b), their CPD is likely to focus on leadership or management tasks, or on highly specialised clinical skills. In both of these cases, CPD is matched to daily practice and therefore fits with both personal and service need, ensuring maximum benefit (Gunn and Godling, 2009). Band 6 physiotherapists have usually developed an idea of where they want to specialise within the profession, but are often still employed in rotational posts, where the CPD they are required to undertake for the service may not fit with their personal area of interest, reducing internal motivation. Because of the nature of their role, they may not feel in a position to influence practice as significantly as higher banded staff, which could in turn, make them feel that the culture of the profession does not value their CPD activity. Although Herzberg’s (1968) motivation-hygiene theory is aimed at motivation to work, rather than to learn, the band 6 physiotherapists in this study appeared to be demotivated towards CPD by many of the hygiene (or external) factors described in the model, such as organisational policy for CPD to be aligned with service need, and status within the organisation. Reduction in their internal motivation could potentially stem from a reduced sense of personal agency (Ryan and Deci, 2017) or a poor internal locus of control (Cassidy and Eachus, 2000), feeling that their power over CPD choices is limited by the constraints of the workplace environment.

Band 5 and 6 physiotherapists felt that they do more CPD because they may be audited by the HCPC significantly more than the higher bands of staff. This could be explained by the fact that these physiotherapists are likely to have been
educated since the introduction of audit and their courses may have placed emphasis on this as a driver for CPD activity. This emphasis during pre-registration education may lead to the development of graduates who are externally motivated to undertake CPD, rather than instilling in them the professionally internal desire for lifelong learning and continual improvement of the self. This lack of internal motivation could be augmented by the fact that HCPC CPD audit is a negatively driven process, with loss of licence because of failing the audit, rather than reward for demonstration of excellent CPD (Festinger, 1964).

**Study strengths and limitations**

One of the strengths of this study is that the sample is representative of the general population of physiotherapists in the UK, in terms of personal and professional demographics (HCPC, 2014). It is, however, a small percentage of the total physiotherapy population (approximately 0.5%), (HCPC, 2018), and therefore responses may not reflect those that would have been received from a larger sample. It is also important to recognise that the results of the questionnaire are subject to self-selection bias, due to the methods of recruitment. It may have been possible to increase the sample size if questionnaires were distributed by a different route, for example posting the link onto relevant Twitter and social media pages, however this would have only attracted physiotherapists who use these platforms. Alternatively, only targeting local employers, with direct contact with physiotherapists, may have improved the return rate on the questionnaire, however
this would have limited the sample to one geographical location, reducing the
generalisability of the findings of the study.

Because of the small number of physiotherapists at band 8b who completed the
questionnaire (n=5) the results could have been skewed. Grades or bandings are
often not considered to be relevant in private practice and this resulted in the
majority of the private practitioners not providing this information; this means that
the analysis relating to the influence of career point is skewed to those working in
the NHS.

Although some of the questions in the questionnaire related to the impact of the
introduction of HCPC audit of CPD in the UK, the participants were not asked
whether they qualified before or after the introduction of audit. This limited the
analysis that was possible on this data.

While previous research has examined CPD behaviours and opinions within the
physiotherapy population (Dowds and French, 2008; Johnson, 2008; Cole et al,
2008; French, 2006; Gunn and Godling, 2009), this is the first study that has
examined whether employment type or point on career path influence how
physiotherapists approach and perceive CPD and CPD portfolios.

Conclusion

Working in a large organisation such as the NHS seems to have an impact on the
motivation of physiotherapists towards CPD, based on the opinions of the
physiotherapists who participated in this study. The impact of external motivating
factors, such as organisational structure, policy and hierarchy, seem to impair
motivation for CPD in general, in comparison to physiotherapists working in private
practice who appear to have more autonomy in terms of their CPD. This is in
keeping with motivational theory. This impact on motivation to continue with lifelong
learning is particularly noticeable in band 6 physiotherapists, who are no longer
novices within the profession, but are still moving towards expert and specialist
practice, where personal and service drivers may not be aligned, causing external
factors to impact on internal motivation for CPD. Employers and physiotherapists
should use the principles of motivational theory when considering how best to
encourage engagement in CPD and lifelong learning, particularly for those staff in
middle grade bandings, working in the NHS.

Lessons for Practice

- Internal motivation for CPD appears strong within the physiotherapists, but
  is influenced by external factors, such as organisational structure and policy,
  and the individuals' place on the organisational hierarchy.
- Improved motivation and engagement with CPD by physiotherapists will
  ultimately improve quality of care and patient experience
- Employers should aim to align CPD activities to meet both personal and
  service needs to maintain internal motivation and reduce the impact of
  external factors
- Pre-registration physiotherapy educators should encourage the
  development of internal motivation and personal responsibility towards CPD,
rather than emphasising the threat of licence withdrawal that may result from HCPC CPD audit.

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Health and Care Professions Council. Continuing Professional Development Audit


Figure 1 – comparison of amount of CPD activity in last month – full sample, NHS and PP
Figure 2 – Comparison of CPD Activity – Bands 6, 7 and 8a
Figure 3 – Benefits of and Barriers to CPD

Benefits of CPD

- Promotion/Career trajectory
- Networking
- Motivation/Satisfaction
- External approval
- Keeping up to date with knowledge and/or skills
- Improved confidence
- Helps to solve work-related problems
- Maintains registration
- Improved image of the profession

Barriers to CPD

- Available CPD is not relevant to my practice
- Lack of employer support for CPD
- Lack of employer support for time out from work to attend CPD activities
- Lack of time out from work for CPD
- No protected time during work hours
- Patient care is prioritised over CPD
- No-one to undertake CPD with
- Financial constraints
- Personal financial constraints
- Geography/access issues to attend CPD activities
- Lack of information about CPD opportunities
- Isolated worker, no-one to undertake CPD with
- Protected time during work hours
- Employer financial constraints
- Lack of employer support for CPD
- Lacking information about CPD opportunities
- Personal financial constraints
- Geography/access issues to attend CPD activities
- Patient care is prioritised over CPD
- No-one to undertake CPD with
- Financial constraints
- Personal financial constraints
### Table 1 – Demographic Data

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</tbody>
</table>

Coding of locations – SE = South East, SW = South West, W = Wales, EA = East Anglia, NW = North West, WM = West Midlands, YH = Yorkshire and Humber, NI = Northern Ireland, S = Scotland, EM = East Midlands
<table>
<thead>
<tr>
<th>Attitude to CPD</th>
<th>FULL SAMPLE (N=205)</th>
<th>NHS (N=171)</th>
<th>PP (N=31)</th>
<th>P VALUE NHS VS. PP</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am unsure what constitutes CPD</td>
<td>13% 87%</td>
<td>12% 88%</td>
<td>17% 83%</td>
<td>0.509</td>
</tr>
<tr>
<td>I am motivated to undertake CPD activities</td>
<td>93% 7%</td>
<td>91% 9%</td>
<td>100% 0%</td>
<td>0.023*</td>
</tr>
<tr>
<td>I get enjoyment from undertaking CPD</td>
<td>89% 11%</td>
<td>88% 12%</td>
<td>100% 0%</td>
<td>&lt;0.001*</td>
</tr>
<tr>
<td>CPD is worthwhile</td>
<td>96% 4%</td>
<td>96% 4%</td>
<td>100% 0%</td>
<td>0.074</td>
</tr>
<tr>
<td>CPD is a chore</td>
<td>43% 57%</td>
<td>45% 55%</td>
<td>31% 69%</td>
<td>0.112</td>
</tr>
<tr>
<td>I feel a sense of achievement when I have completed some CPD</td>
<td>93% 7%</td>
<td>92% 8%</td>
<td>96% 4%</td>
<td>0.057</td>
</tr>
<tr>
<td>Undertaking CPD gives me job satisfaction</td>
<td>89% 11%</td>
<td>87% 13%</td>
<td>96% 4%</td>
<td>0.046*</td>
</tr>
<tr>
<td>There is value in undertaking CPD</td>
<td>92% 8%</td>
<td>92% 8%</td>
<td>89% 11%</td>
<td>0.968</td>
</tr>
<tr>
<td>The culture of physiotherapy as a profession does not recognise the value of CPD</td>
<td>16% 84%</td>
<td>16% 84%</td>
<td>11% 89%</td>
<td>0.918</td>
</tr>
<tr>
<td>I do not need external prompting to undertake CPD</td>
<td>80% 20%</td>
<td>78% 22%</td>
<td>86% 14%</td>
<td>0.079</td>
</tr>
<tr>
<td>Lifelong learning is an expected part of my professional status</td>
<td>99% 1%</td>
<td>97% 3%</td>
<td>100% 0%</td>
<td>0.800</td>
</tr>
<tr>
<td>I cannot maintain my professional status unless I undertake CPD activities</td>
<td>86% 14%</td>
<td>87% 13%</td>
<td>86% 14%</td>
<td>0.438</td>
</tr>
<tr>
<td>CPD is only relevant for those still developing in their professional careers</td>
<td>8% 92%</td>
<td>9% 91%</td>
<td>7% 93%</td>
<td>0.859</td>
</tr>
<tr>
<td>I should only have to undertake CPD if there is opportunity for career progression for me</td>
<td>15% 85%</td>
<td>16% 84%</td>
<td>0% 100%</td>
<td>0.226</td>
</tr>
<tr>
<td>I do not need to undertake CPD to maintain my professional competence</td>
<td>6% 94%</td>
<td>6% 94%</td>
<td>0% 100%</td>
<td>0.548</td>
</tr>
<tr>
<td>Undertaking CPD has helped to improve client/patient outcomes</td>
<td>94% 6%</td>
<td>92% 8%</td>
<td>96% 4%</td>
<td>0.287</td>
</tr>
<tr>
<td>It is difficult to implement changes generated from CPD into practice</td>
<td>43% 57%</td>
<td>46% 54%</td>
<td>21% 79%</td>
<td>0.002*</td>
</tr>
<tr>
<td>I have started undertaking more CPD since the introduction of HCPC CPD audit</td>
<td>54% 46%</td>
<td>56% 44%</td>
<td>45% 55%</td>
<td>0.977</td>
</tr>
<tr>
<td>I undertake CPD because I might be asked to submit for HCPC CPD audit</td>
<td>59% 41%</td>
<td>59% 41%</td>
<td>55% 45%</td>
<td>0.775</td>
</tr>
<tr>
<td>Employer support (financial/time/cover) for CPD has improved since the introduction of HCPC CPD audit</td>
<td>34% 66%</td>
<td>35% 65%</td>
<td>31% 69%</td>
<td>0.614</td>
</tr>
</tbody>
</table>
### Table 3 – Attitudes to CPD by Band

<table>
<thead>
<tr>
<th>Item</th>
<th>Band 5 (N=33)</th>
<th>Band 6 (N=74)</th>
<th>Band 7 (N=48)</th>
<th>Band 8A (N=17)</th>
<th>Band 8B (N=6)</th>
<th>P Value Kruskal Wallis Test</th>
<th>P Values Post Hoc Mann Whitney U Tests (Statistically significant results only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am unsure what constitutes CPD</td>
<td>9</td>
<td>91</td>
<td>18</td>
<td>82</td>
<td>9</td>
<td>91</td>
<td>6</td>
</tr>
<tr>
<td>I am motivated to undertake CPD activities</td>
<td>97</td>
<td>3</td>
<td>89</td>
<td>11</td>
<td>87</td>
<td>13</td>
<td>100</td>
</tr>
<tr>
<td>I get enjoyment from undertaking CPD</td>
<td>97</td>
<td>3</td>
<td>96</td>
<td>4</td>
<td>93</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>CPD is worthwhile</td>
<td>94</td>
<td>6</td>
<td>92</td>
<td>8</td>
<td>87</td>
<td>13</td>
<td>94</td>
</tr>
<tr>
<td>There is value in undertaking CPD</td>
<td>97</td>
<td>3</td>
<td>92</td>
<td>8</td>
<td>87</td>
<td>13</td>
<td>94</td>
</tr>
<tr>
<td>The culture of physiotherapy as a profession does not recognise the value of CPD</td>
<td>3</td>
<td>97</td>
<td>22</td>
<td>78</td>
<td>17</td>
<td>83</td>
<td>12</td>
</tr>
<tr>
<td>I do not need external prompting to undertake CPD</td>
<td>78</td>
<td>22</td>
<td>75</td>
<td>25</td>
<td>76</td>
<td>24</td>
<td>88</td>
</tr>
<tr>
<td>Lifelong learning is an expected part of my professional status</td>
<td>100</td>
<td>0</td>
<td>99</td>
<td>1</td>
<td>100</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>I cannot maintain my professional status unless I undertake CPD activities</td>
<td>91</td>
<td>9</td>
<td>85</td>
<td>15</td>
<td>87</td>
<td>13</td>
<td>94</td>
</tr>
<tr>
<td>CPD is only relevant for those still developing in their professional careers</td>
<td>3</td>
<td>97</td>
<td>14</td>
<td>86</td>
<td>9</td>
<td>91</td>
<td>0</td>
</tr>
<tr>
<td>I should only have to undertake CPD if there is opportunity for career progression for me</td>
<td>3</td>
<td>97</td>
<td>11</td>
<td>89</td>
<td>2</td>
<td>98</td>
<td>0</td>
</tr>
<tr>
<td>I do not need to undertake CPD to maintain my professional competence</td>
<td>0</td>
<td>100</td>
<td>11</td>
<td>89</td>
<td>7</td>
<td>93</td>
<td>0</td>
</tr>
<tr>
<td>Undertaking CPD has helped to improve client/patient outcomes</td>
<td>81</td>
<td>19</td>
<td>93</td>
<td>7</td>
<td>89</td>
<td>11</td>
<td>100</td>
</tr>
<tr>
<td>It is difficult to implement changes generated from CPD into practice</td>
<td>41</td>
<td>59</td>
<td>56</td>
<td>44</td>
<td>37</td>
<td>63</td>
<td>50</td>
</tr>
<tr>
<td>I have started undertaking more CPD since the introduction of HCPC CPD audit</td>
<td>53</td>
<td>47</td>
<td>60</td>
<td>40</td>
<td>59</td>
<td>41</td>
<td>50</td>
</tr>
<tr>
<td>I undertake CPD because I might be asked to submit for HCPC CPD audit</td>
<td>69</td>
<td>31</td>
<td>78</td>
<td>30</td>
<td>52</td>
<td>48</td>
<td>38</td>
</tr>
<tr>
<td>Employer support (financial/time/cover) for CPD has improved since the introduction of HCPC CPD audit</td>
<td>56</td>
<td>44</td>
<td>38</td>
<td>64</td>
<td>24</td>
<td>76</td>
<td>12</td>
</tr>
</tbody>
</table>

Note: Values in %, P < 0.05 indicate statistical significance.