Changes in New Recruits’ Motivation and Intention to use a Learning Portfolio:
A Longitudinal Investigation

Michal Tombs\textsuperscript{a}\textsuperscript{*} & Phillip, L. Morgan\textsuperscript{b}

\textsuperscript{a} Wales Deanery, Postgraduate Medical and Dental Education, Cardiff University, Cardiff, UK.
\textsuperscript{b} Department of Health and Social Sciences, Centre for Health and Clinical Research and the Centre for Research in Biosciences, University of the West of England (UWE) - Bristol, Frenchay Campus, Bristol, UK.

\textsuperscript{*}Corresponding Author:
Dr Michal Tombs
Wales Deanery, Postgraduate Medical and Dental Education
Cardiff University
Neuadd Meirionnydd, Heath Park, Cardiff, CF14 4YS
Email: TombsM2@cardiff.ac.uk
**Introduction**

The training of police has traditionally been based on pedagogical instructor-led models but the applicability and efficacy of these have been criticised (Vodde, 2008). This criticism has led to a shift in approach to police training that advocates an andragogical philosophy when developing new recruits (Birzer, 2003; McCoy, 2006). In line with this approach, training aims to be more learner-centred where trainees are treated as adult learners and teaching is more experiential (Knowles, 1984). This has created a change in training practices and assessment of performance, with an increase in the use of the learning portfolio. This is because the learning portfolio, at its core, is based on learning by doing. It is aimed at encouraging workers to be proactive and responsible for their learning (Stewart, 2003). Defined as a systematic and organised collection of evidence to monitor trainees’ knowledge, skills and attitudes (Vavrus 1990), policing establishments make extensive use of learning portfolios for assessment of trainees’ competencies.

A large body of evidence exists with regards to the use of learning portfolios in medical, healthcare, and teaching professions (e.g., Bowers, 2005; Driessen et al., 2007; Tochel et al., 2009) and there has also been an increase in studies involving learning portfolio use amongst student populations (Lin et al., 2013; Scott, 2010). These studies are largely unequivocal in their conclusion that the value of this self-directed methodology is determined by the perceptions and motivations of those using the tool (Vance et al., 2013). However, despite its extensive use in police training, there is a paucity of systematic research on the use of the learning portfolio in the policing profession. The purpose of the current study was to address this gap and to examine perceptions and motivational processes amongst newly recruited Police Community Support Officers (PCSOs) who are required to complete a learning portfolio for their role. With key reference to Expectancy Theory (Vroom, 1964) and the Theory of Planned Behaviour (Ajzen, 1991), changes in trainees’ perceptions of
instrumentality (motivation) and intentions to complete the portfolio were examined at four different points over a 6-month period.

**The training of Police Community Support officers and the learning portfolio**

The present study was conducted in collaboration with a Police Constabulary in Wales, UK. Data from a sample of newly recruited Police Community Support Officers (PCSOs) were collected in 2009/10. The role of the PCSO was introduced with the enactment of the Police Reform Act in 2002 (Cosgrove, 2016), which created the possibility for police support staff, endowed with limited powers, to undertake a variety of uniformed patrolling tasks. Defined as “uniformed civilian employees of [a] police authority . . . directed and controlled by the chief officers” (Newburn and Neyroud, 2008, p.42), PCSOs are members of police staff whose main function is to provide an additional uniformed presence and to act as a link between the police and communities (College of Policing, 2015). They work with and are managed by police supervisory officers and share some, but not all of their powers (Merrit, 2010). For example, they can administer a fixed penalty notice (e.g., for littering), demand the name and address of someone being anti-social, and take alcohol off a person under 18 years of age. However, if they deem that a person should be placed under arrest, they need to ask a police officer to enforce as they do not have the power to do so.

Due to the successful introduction of the role, police constabularies across the UK were allocated additional funding in order to increase the number of PCSOs in their constabularies and to put additional resources into training (Peace, 2006). A set of ‘Learning Descriptors’ that relate to the role were produced by Centrex (now part of the National Police Improvement Agency) in consultation with the Association of Chief Police Officer (ACPO) and the Home Office (Peace, 2006). These were linked directly to the National Occupational Standards (NOS). Whilst a single training package was made available with guidelines and
supporting documents, it was designed in such a way that constabularies could use it flexibly to accommodate local demands.

At the time of conducting the current study the role of a PCSO was dependent upon completion of a successful probationary period of one year. New recruits were required to attend and complete a 16-week initial training programme, which introduced them to the organisation and their role. Although they did sit some tests to assess acquisition of knowledge related to their role and were assessed through observation of role play activities at a training centre, not much emphasis was placed on grades or objective assessments such as tests. What happened on the job was of more importance, placing ‘on the job training’ as central to development of PCSO understanding and skills associated with their role. This approach supports the idea that training should not merely be designed to prepare people for work, but instead should develop those in work through experience and application (Nikolou-Walker, 2007). Thus, once formal training was completed, PCSO trainees were posted to a police station where they continued ‘on-the-job’ training and mentoring. Much like police student officers, skill transfer and competencies to perform their role were assessed through the completion of a learning portfolio referred to as the Student Officer Learning Assessment & Portfolio (SOLAP). This portfolio followed a national curriculum set by a Central Police Training and Development Authority (Centrex). It was used as a way of assessing trainees’ competencies against a PCSO Policing Action Checklist, which was designed on basis of National Occupational Standards. The checklist used within the current study contained 15 units of assessment for which the trainee had to demonstrate competencies through acquisition and evidence of knowledge, understanding and skill. Despite the pivotal role of the SOLAP, the organisation noted some issues around its completion that in part motivated the current study. Although trainees were aware of the fact that the Learning Portfolio had to be signed off and passed for them to successfully move on to a permanent appointment, the
standards varied greatly and submissions were coming in very late. The organisation was therefore keen to explore this issue further by exploring trainees’ attitudes and motivation towards this training material.

*The importance of instrumentality and intentions for successful completion of a learning portfolio*

The reflective process that is crucial to the effectiveness of a learning portfolio requires employees to focus on themselves, their context, and the use of a number of skills and strategies with which to engage in self-assessment (Tochel et al., 2009). For this reason, the successful completion of the portfolio depends on many factors. Not only do trainees need to have the external resources required for self-assessment such as time and support (Lin et al., 2013), they also need to have the required skills and a heightened level of self-awareness and meta-cognition (Bowers, 2005). Further, they need to believe that the portfolio is a useful tool for them and to actually intend to engage with it (Clark et al., 2001). The latter are linked to expectancy and intended behaviour. From an Expectancy Theory perspective (Vroom, 1964) and from the viewpoint of the Theory of Planned Behaviour (Ajzen, 1991), training outcomes are determined by individual cognitions. Both theories claim that behaviours are under volitional control in the sense that people can perform them if they are motivated and/or inclined to do so. According to Vroom (1964), one aspect of motivation is defined by a person’s expectation of outcomes, which is known as *instrumentality* (Chiaburu and Lindsay, 2008). Intentions, on the other hand, are defined as the amount of effort one is willing to exert to attain a goal (Ajzen, 1991). Both motivation through instrumentality and intentions through effort are recognised antecedents of goal choice and action within the training context (Colquitt et al., 2000; Beier and Kanfer, 2010) and both may be crucial to the effectiveness of using and getting the most out of a learning portfolio.
Many researchers argue that trainees make instrumentality-based calculations when thinking about the anticipated consequences of participating in training (Baruch, 2001). Instrumentality is concerned with job or career related benefits, and pivotal to the decision-making process is the question of what purpose the training activity will serve (e.g., ‘is it worth it?’) and whether this purpose is likely to be met (e.g., ‘is it achievable?’) (Chiaburu and Lindsay, 2008; Vroom, 1964). Thus, if completion of a learning portfolio is the key outcome measure by which training success is measured, one could argue that trainees who understand and ‘sign-up’ to the benefits of completing it are more likely to work towards achieving this goal. In addition, trainees’ intention to engage with the materials and the requirements of the training programme is an important component for subsequent behaviour (Hurtz and Williams, 2009).

The Theory of Planned Behaviour has been a useful tool for predicting a wide range of behaviours in various contexts (for a review see Armitage and Conner, 2001). One of the key theoretical assumptions is that actions are controlled by intentions and therefore having clear and achievable intentions are paramount to realising the maximum benefits of the training task or activity (Ajzen, 1991; Gegenfurther et al., 2009). On basis of this assertion, we argue that trainees’ engagement in completion of, and continued use of a learning portfolio, greatly depends on their intentions to do so.

**Aims of the current study**

Individuals will usually enter training with expectations and intentions to engage with the training course. However, these are likely to change throughout the training period; particularly when training programmes are relatively long (Warr and Bunce, 1995), such as is the case with PCSO training. This may be due to the idea that at the start of a training programme, individuals’ knowledge of what is involved may be limited and/or inaccurate,
and expectations and attitudes may change as a result of exposure to the training content and method (Tannenbaum et al., 1991). More specifically, cognitions and motivation may change as trainees develop a more realistic belief about the training course (Tannenbaum et al., 1991; Cole and Field, 2004; Harris and Cole, 2007). Underpinning the current study was the notion of change, reflecting the idea that completion of the portfolio is not done in isolation and that the portfolio is part of the wider developmental and learning process the trainees are engaged within. With this in mind the research question was set to examine whether and in what direction (increase or decrease) new recruits’ perceptions of instrumentality of the learning portfolio (motivation) and intentions to complete it change during their training period for their role.

**Method**

**Design and procedure**

The study followed a longitudinal questionnaire design. Participants were asked to complete an identical set of questions to assess their perceptions of instrumentality of the learning portfolio and their intentions to complete it at four different time points. These four time points reflected key milestones during the training period. To appreciate these fully, it is important to understand the stages of training, and these are displayed in Table 1.
### Table 1: Structure of the training programme and data collection

<table>
<thead>
<tr>
<th>Phase</th>
<th>Content of training</th>
<th>Data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 1</strong></td>
<td><strong>Initial training phase</strong> - Classroom based teaching. The focus of this phase is on rules, procedures, and duties</td>
<td><strong>T1</strong> - after the first 6-weeks of initial classroom based training</td>
</tr>
<tr>
<td>Weeks 1 - 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Phase 2</strong></td>
<td><strong>Tutoring phase</strong> – PCSOs are placed in a police station and under the supervision of an assigned mentor. They are trained to deal with ‘real’ cases and interact with the public</td>
<td></td>
</tr>
<tr>
<td>Weeks 7 - 12</td>
<td><strong>Annual Leave</strong></td>
<td>Week 13</td>
</tr>
<tr>
<td><strong>Phase 3</strong></td>
<td><strong>Final phase of official training</strong> – Classroom based. PCSOs integrate their newly acquired knowledge and skills from Phase 2</td>
<td><strong>T2</strong> - Upon return from the tutoring phase</td>
</tr>
<tr>
<td>Weeks 14 - 16</td>
<td></td>
<td><strong>T3</strong> – Upon completion of the 16-week training</td>
</tr>
<tr>
<td><strong>Phase 4</strong></td>
<td><strong>On the job learning</strong> - PCSOs are located within a police station, where they are allocated a mentor and are expected to apply the newly acquired skills and continue learning on the job, whilst recording their learning in the learning portfolio.</td>
<td><strong>T4</strong> - Half way through the probation period</td>
</tr>
<tr>
<td>Up to 1 year into the job</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The 16 weeks initial training period is carried out in three phases. Phase 1, which lasts for 6-weeks, is referred to as ‘the initial training phase’ and is based in a classroom environment. The focus of this phase is on rules, procedures, and duties. Trainees then move on to Phase 2, which is referred to as ‘the tutoring phase’. Here they are placed in a police station and under the supervision of an assigned mentor and they are trained to deal with ‘real’ cases and interact with the public. This phase is 7-weeks long, with 6-weeks in the police station and 1-week of leave. Phase 3 is the final phase of official training where PCSOs return to the classroom environment in order to integrate their newly acquired knowledge and skills from Phase 2. After this initial 16-week training period, PCSOs are located within a police station, where they are allocated a mentor and are expected to apply the newly acquired skills and continue learning on the job, whilst recording their learning in the learning portfolio. They do this up until the end of their probationary period, which is one year. The training timeline therefore provided a framework for the data collection timeline (see Table 1):

(T1) after the first 6-weeks of initial classroom based training;
(T2) Upon return from the 7-weeks tutoring phase (13-weeks into initial training);
(T3) after completion of the final 3-weeks classroom based training (i.e., completion of the 16-weeks training), and;
(T4) half way through the probation period (approximately 6-months into the role).

Questionnaires at T1, T2, and T3 were completed in class time, which had already been arranged with the trainers in charge. The trainers were not present in the class during the studies; however, the researcher was present at all times. A course attendance list was provided prior to the start of each course, which meant that participants could be assigned with ID numbers. An individual’s ID number remained with them for the duration of the
study. Participants were informed that this information would be kept confidential and only seen by research team, and after all data had been entered onto the computer it would be anonymised. Ethical approval was granted on the assumption that anonymity of the organisation (e.g., the exact police constabulary including specific regional location information) and the participants will be maintained.

Data were collected at the training centres at the end or near the end of each phase of training. Each trainee was provided with an envelope containing an information sheet, consent form and the questionnaire with their ID number.

Initially, the information sheet was read to the class to ensure that all information provided was standardised. Trainees then completed the consent form and the questionnaire (see Materials). On completion of the questionnaire, trainees placed all documents back into the envelope, sealed it and placed it in a box marked ‘Training Study’. Trainees who did not wish to participate, were advised at the beginning of the study to still place their envelope in the box along with the uncompleted contents, so that no-one would know if they had participated or not. The T4 questionnaire was sent to the Learning & Development Unit and was distributed to participants from this central location. Questionnaires were sent with stamped addressed envelopes to be returned directly to the researcher.

Participants

One hundred and fifty nine newly recruited Police Community Support Officers (PCSOs) took part in the study. However, complete data (from all study time points) were available for 70 (44%). The 89 trainees that were excluded from the final sample were PCSOs who, for a variety of reasons, did not complete all four questionnaires. Indeed, attrition is very common in longitudinal research (Ployhart & Vandenberg, 2010) and in applied studies of this nature it is not uncommon to find the response rate drop by half or
more between the first and last measurement occasion (Chan, 1998). Attrition occurred either because participants were not always available at the point of data collection (i.e., T1, T2 and T3) or because not all questionnaires were returned to the researcher at T4. For example, although 95 participants returned the final questionnaire (T4), only 70 were used as for the remaining 25 data were missing from the previous questionnaires. It is impossible to ascertain the exact reason as to why not all questionnaires were returned and why some participants were absent on the day that data collection took place in the training centre. A Multivariate Analysis of Variance (MANOVA) was therefore conducted to examine whether the final sample differed in terms of characteristics from the excluded sample. This revealed that there were no demographic differences between the 70 participants in the study sample or the 89 who were excluded from the final sample (i.e., those that did not complete all questionnaires). The 70 trainees who completed all four questionnaires constituted the study sample in which data were further analysed from. The mean age was 26.69 ($SD = 7.75$) with an age range between 19 to 52. 36 were males and 24 were females, and all described themselves as white. The majority of trainees applied for the role as they perceived it as a stepping stone to eventually becoming a Police Constable in the future (77%), with only 16 trainees primarily interested in the role of a PCSO over the longer-term. This supports previous research findings on PCSO orientation for their role (Cosgrove, 2016).

**Materials**

The questionnaire contained background questions relating to age, gender, ethnic background, and reason for joining the Police force as a PCSO. Reason for joining was asked as the organisation recognised that new recruits have different motivations for applying for the role. They were interested to find out how many were primarily interested in the PCSO
role and how many perceived it as a stepping stone to possibly securing a fast tracked route to becoming Police Officers (Cosgrove, 2016). The question was designed to capture this (see appendix).

The instrumentality and intentions items were designed to reflect previously defined perceptions of instrumentality (Mathieu et al., 1992) and intentions to complete the portfolio (Ajzen, 1991) and were written to reflect the discussions with the organisation (See Appendix for a copy of all items). Five items measured instrumentality and five measured intentions to complete the portfolio. Upon consulting the psychometric literature (Nunnally 1978), all items required participants to indicate on a Likert scale from 1 to 7 (strongly disagree to strongly agree) how much they agreed or disagreed with statements. A copy of the items that comprised each of the scales can be found in the Appendix.

Data treatment and analysis

The scores for the instrumentality and intentions variables were calculated and the data were tested for normality and outliers. No violation of assumptions were identified and all variables were normally distributed. Eleven missing values were identified and were replaced by the grand mean for all cases in order to avoid a reduction in sample size. This method was selected because the proportion of missing values was random and very small (less than 5% of cases, Tabachnick and Fidell, 2001). Descriptive statistics were computed for all variables, followed by internal consistency reliability estimates. As the focus of the study was on examination of changes in instrumentality and intentions, a repeated measures Analysis of Variance (ANOVA) was conducted to determine whether differences in instrumentality and intentions between the training phases were statistically significant. Effect sizes for ANOVAs were calculated using Cohen’s $f$ (Cohen, 1988) with an $f \leq 1$ indicating a small effect size, an $f$ of $0.25$ a medium effect size and an $f \geq 0.4$ a large effect size.
Results

Descriptive statistics

Scale means and standard deviations for the scales can be found in Table 1. Cronbach $\alpha$ reliability coefficients ranged between .74 to .92, indicating acceptable internal consistencies (Pallant, 2005). With a possible range of 5–35 on all scales and a midpoint of 20, results suggest high levels of motivation and intentions to complete the portfolio at the start of training (T1). With a mean of 27.70 for instrumentality and 29.86 for intentions, figures suggest that upon completion of the 6-week training period in the training centre and just before going on a placement at a Police station, trainees believed the learning portfolio to be instrumental to their role as PCSOs and intended to put effort into completing it. When returning from their placement (T2), trainees perceptions of instrumentality and intentions reduced (21.11 and 26.86 respectively), but these figures suggest that trainees were still moderately motivated (above the midpoint). Moreover, these levels remained fairly constant at the final stage (T3) of formal training (21.47 and 25.77, respectively). A further reduction in motivation and intentions can be seen at T4 (6-months into their role as PCSOs). Levels still remained within the average range for both instrumentality and intentions, but are markedly lower than at the start of training (17.14 and 21.53, respectively). These results strongly indicate that trainees’ perceptions of instrumentality and intentions to complete the learning portfolio reduced throughout the different phases of training.
**Table 1:** Means and Standard Deviations for Instrumentality and Intention Scores across the Different Training Phases.

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Instrumentality</th>
<th>Intentions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time 1: 6 weeks</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$M$</td>
<td>27.70</td>
<td>29.86</td>
</tr>
<tr>
<td>$SD$</td>
<td>4.67</td>
<td>3.26</td>
</tr>
<tr>
<td><strong>Time 2: 13 weeks</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$M$</td>
<td>21.11</td>
<td>26.86</td>
</tr>
<tr>
<td>$SD$</td>
<td>6.62</td>
<td>4.87</td>
</tr>
<tr>
<td><strong>Time 3: 16 weeks</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$M$</td>
<td>21.47</td>
<td>25.77</td>
</tr>
<tr>
<td>$SD$</td>
<td>10.52</td>
<td>6.14</td>
</tr>
<tr>
<td><strong>Time 4: 6 Months</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$M$</td>
<td>17.14</td>
<td>21.53</td>
</tr>
<tr>
<td>$SD$</td>
<td>7.44</td>
<td>7.21</td>
</tr>
</tbody>
</table>

Pearson Correlation tests were conducted in order to assess the relationship between the variables (see Table 2). As expected, the measures of instrumentality and intentions were significantly correlated in most cases ($r$ ranged between .19 - .75), but this does not raise concern over multicollinearity (Tabachnick and Fidell, 2001), confirming the variability of responses at the different time points. Of particular interest is the finding that the relationship between instrumentality and intentions at Time 1 and Time 4 was small yet significant ($r = .29, p < .05$). The relationship between intentions at Time 1 and intentions at Time 4 was also small and not statistically significant ($r = .19, p > .05$). This suggests that trainees levels of motivation and intentions to complete the learning portfolio at the start of the training course were different from scores on these measures 6-months into the role.
Table 3: Intercorrelations of Study Variables (N = 70).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Gender</td>
<td>-0.18</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Reason for joining</td>
<td>0.38**</td>
<td>-0.19</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Instrumentality T1</td>
<td>0.08</td>
<td>0.02</td>
<td>0.12</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Intentions T1</td>
<td>0.05</td>
<td>-0.02</td>
<td>0.04</td>
<td>0.69**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Instrumentality T2</td>
<td>-0.02</td>
<td>0.17</td>
<td>0.07</td>
<td>0.46**</td>
<td>0.35**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Intentions T2</td>
<td>-0.04</td>
<td>0.10</td>
<td>0.01</td>
<td>0.39**</td>
<td>0.39**</td>
<td>0.70**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Instrumentality T3</td>
<td>0.04</td>
<td>0.03</td>
<td>0.25*</td>
<td>0.37**</td>
<td>0.43**</td>
<td>0.50**</td>
<td>0.51**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Intentions T3</td>
<td>0.11</td>
<td>0.20</td>
<td>0.06</td>
<td>0.43**</td>
<td>0.42**</td>
<td>0.53**</td>
<td>0.75**</td>
<td>0.54**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10. Instrumentality T4</td>
<td>0.07</td>
<td>0.09</td>
<td>-0.01</td>
<td>0.29*</td>
<td>0.18</td>
<td>0.58**</td>
<td>0.54**</td>
<td>0.32**</td>
<td>0.62**</td>
<td>1</td>
</tr>
<tr>
<td>11. Intentions T4</td>
<td>0.04</td>
<td>0.01</td>
<td>-0.12</td>
<td>0.29*</td>
<td>0.19</td>
<td>0.38**</td>
<td>0.46**</td>
<td>0.24*</td>
<td>0.60**</td>
<td>0.81**</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01.

Changes in instrumentality and intentions

To determine whether instrumentality and intentions scores were significantly different between training phases, repeated measures ANOVAs were conducted on each measure. There was a significant reduction in intention scores across training phases (with Huynh-Feldt corrected values reported due to a significant violation of sphericity, p < .001), $F(2.41, 1666.12) = 49.47$, $MSE = 21.09$, $p < .001$, $f = .85$. Bonferroni post-hoc tests revealed that intention scores were significantly lower at Phase 4 (i.e., after 6-months) of training compared with Phases 1-3 ($p < .001$) and at Phases 2 and 3 compared with Phase 1 ($p < .001$). However, intention scores did not differ between Phases 2 and 3 ($p = .17$). There was also a significant reduction in instrumentality scores across training phases (also with Huynh-Feldt corrected values reported due to a significant violation of sphericity, p < .001), $F(2.35, 162.13) = 37.01$, $MSE = 45.93$, $p < .001$, $f = .73$. Bonferroni post-hoc tests revealed that
instrumentality scores were significantly lower at Phase 4 of training compared with Phases 1-3 (ps < .000, < .001, and = .007 respectively) and at Phases 3 and 2 compared with Phase 1 (ps < .001). However, instrumentality scores did not differ between Phases 2 and 3 (p = 1).

Discussion and Conclusions

The purpose of the current study was to explore newly recruited PCSOs’ motivations and intentions to complete a learning portfolio that formed part of the training for their role. The study focused on examining possible changes in perceptions of instrumentality and intentions to complete the portfolio, and findings provide evidence that there was a substantial reduction in both perceptions of instrumentality and intentions to complete the portfolio. At the early stages of training and upon completing the first 6-weeks of formal training at a training centre (Time 1), recruits generally perceived the portfolio to be a highly useful learning tool and indicated that they intended to work on it regularly. However, and based upon the findings of the current study, this may have given the organisation a false impression as scores decreased significantly on both measures after a period of a placement at a police station (Time 2). In contrast, there was no significant reduction in motivations or intentions between Time 2 and Time 3, and this was the training period in which PCSOs spent a further and final 3-weeks phase at the in-house training centre.

Further reductions in both instrumentality and intentions were found at a later stage (Time 4 – 6-months after starting PCSO training), showing a substantial reduction once recruits were performing their actual job more independently. This reduction showed that at later stages, trainees were no longer highly motivated or very keen (intentions) to work on the portfolio; at least not as much as at the start of training. Thus, it may be tentatively suggested that the poor figures associated with completion of the learning portfolio (linked to the main
practical evaluation aim of the study) may be attributed to reduced levels of motivation and intention. As suggested by previous research, trainees who perceive a training activity to have very little work related benefit (e.g., Chiaburu and Lindsay, 2008) and do not intend to be fully engaged (e.g., Gegenfurther et al., 2009), are less likely to do well at that training activity and/or benefit from it. The results from the current study support and extend these findings within the context of police work and specifically amongst trainee PCSOs.

Given that the reduction in motivation and intentions to complete the portfolio occurred when trainees were placed in the work environment (T1 to T2, and T3 to T4), there can be a number of possible explanations worth noting that warrant future research. To begin with, questions such as whether the PCSOs were provided with support and resources for completion of the learning portfolio could be asked (Wade and Yarbrough 1996; Driessen et al., 2005). In addition, the organisation may want to explore whether the aim of the learning portfolio was clearly communicated across the organisation, whether the structure was clear enough for trainees to take ownership of the process, and whether trainees understood what constitutes of appropriate content and evidence (Smith and Tillema, 1998). Finally, it will also be useful to know whether trainees were permitted to engage in meaningful and appropriate discussions with those they needed to collaborate with such as peers, mentors, and line-managers. Failure to recognise the importance of support and not providing a clear process may send the message to trainees that completing the portfolio is not perceived as important as they may have believed it to be at the start of training (Driessen et al., 2005).

These are important questions as all of these factors could potentially impact motivation and engagement with the process and completion of the portfolio.

Additionally, it is unclear whether mentors and line managers were able to communicate the value of the tool in the same way as trainers did during earlier formal training phases. To illustrate, trainers often recognise the link between perceived benefits and
effective use of learning portfolios and go to great length to communicate this to trainees (Driessen et al., 2005). This recognition, however, is not always shared by those who ultimately have to support the trainees in their work environment (e.g., mentor, line manager, and supervisor) (Pearson and Heywood, 2004). The learning portfolio is an assessment tool that is used within an overall assessment strategy of competencies. It is designed to assess experiential learning, and this is underpinned by andragogy (Moon, 2004). However, the extent to which the culture and training environment in police constabularies has truly embraced this philosophy has been questioned (Peace, 2005). Evidence suggests that the training culture remain teacher-centred (McCoy, 2006) and with this in mind it is possible that mentors or supervisors were not fully prepared for their role as facilitators of learning. In addition, evidence suggested that when the PCSO role was first introduced it was not well integrated into the ‘police extended family’ (Johnston, 2005), and police officers were often confused about the nature of the role due to lack of guidelines (Paskell, 2007). Future research on how the relationship between police officers and trainee PCSOs may impact the learning journey will help shed light on the topic (Cosgrove, 2016).

Another possible explanation for the reduction in motivation and intentions may be linked to trainees developing a more strategic view of the portfolio, its value and the role it plays in them passing the probation period. Research in educational settings suggests that if a portfolio is not graded, trainees’ and mentors may question whether the whole exercise is worth the effort (Snadden and Thomas, 1998). In the current setting, the question may not be so much about grading, but more about the link to actual outcomes and possible consequences of not completing the portfolio fully or the consequences of late submission. For example, individuals may have become aware of instances where others passed the probation period and were appointed to their role, having submitted a less than adequate portfolio or submitted it late. Thus, the extent to which SOLAP completion was perceived by
trainees as a requirement for appointment and whether and how this was enforced may need to be further examined. Future research would benefit from exploring this further by asking trainees about their experiences, observations and interpretations of how much effort they need to put into their portfolio.

This study is not without its limitations and these should be taken into account when interpreting the findings. Being constrained by testing time meant that we could not consider the possible processes and events that occurred at the different phases of training, and thus we can only speculate the possible causes for the reduction in perceptions of instrumentality and intentions to complete the portfolio. Furthermore, change was assessed by the use of self-reported questionnaires where participants were asked to answer a set of identical questions at four different time points. Whilst the longitudinal method used has its strengths, self-reported measures have their weakness in so much as they do not provide much of an explanation for the change (Schmitt, 1994). Further research, particularly of a qualitative nature (e.g., asking trainees about their perceptions of enablers and barriers to complete the portfolio), may provide extra valuable insight into the experiences of new recruits with the learning portfolio and how they perceive it in terms of importance (e.g., Smith and Tillema, 1998).

In conclusion, the findings reveal that PCSO trainees’ perceptions of instrumentality and intentions to engage and complete the learning portfolio significantly reduced over time and most significantly when moving on from a formal to an informal training setting (i.e., to the workplace environment). The findings have both theoretical and practical implications. On a theoretical level, this supports the view that motivation and intentions are malleable and complex constructs that change during training episodes and can be influenced by a variety of contextual factors (e.g., Warr and Bunce, 1995; Cole and Field, 2004; Beier and Kanfer, 2010). From a practical perspective, these findings imply that training programmes that rely
extensively on learning portfolios would benefit from considering these changes in motivation and intentions at the planning stage. Further research exploring factors that may have attributed to the decrease in motivation and intentions should provide organisations with valuable evidence on how motivation and engagement with learning portfolios can be leveraged and improved (Beier and Kanfer, 2010). Effective portfolios require substantial effort and time from trainees and those intending to implement a learning portfolio should carefully consider whether they will be able to create the favourable learning environment needed for successful portfolio use (Driessen et al., 2005).
Appendix

Question on motivation for the role:

I joined XXX as a PCSO because (please tick the ONE you agree with most):

- This is the best route for me to take in order to eventually train to be a Police Constable
- The job of a PCSO is more appealing to me than the job of a Police Constable

**Items comprising the instrumentality scale:**

1. Completing the SOLAP will help me perform my job as a PCSO
2. Completing the SOLAP is an essential part of my training
3. Without completing the SOLAP I will not be able to pass the probationary period
4. The SOLAP is a useful tool for me to work out my developmental needs with my supervisor
5. It is in my interest to regularly review and complete my SOLAP

**Items comprising the intentions scale:**

1. I intend to review and document evidence in my SOLAP on regular basis
2. I intend to complete the SOLAP by the end of my probationary period
3. Completing the SOLAP is my responsibility and I intend to request my supervisor / assessor to review it with me
4. I intend to complete each stage of the SOLAP within the agreed deadlines
5. I intend to be proactive about completing my SOLAP

**References**


