Paws for Progress: The development and evaluation of the first prison based dog training programme in the UK

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Abstract

The most common type of human animal interaction (HAI) programme used in prisons involves prisoners caring for and training unwanted dogs from rescue shelters, to prepare the dogs for rehoming. Such programmes have been previously developed specifically aimed towards male young offenders, and are claimed to improve emotional, social and practical outcomes.

Paws for Progress, the first prison based dog training programme in the UK, was introduced to HM YOI Polmont in 2011. By clearly communicating each step of the 5 Step approach (1. Identify the problem; 2. Review the evidence; 3. Develop a logic model; 4. Identify indicators and monitor the logic model; 5. Evaluate the logic model), it has enhanced our understanding of the development processes required for effective prison based dog training programmes.

This evaluation provides the first comprehensive quantitative analysis of short, medium and long term outcomes for Scottish young offenders serving custodial sentences (N = 70) following participation. The aims of Paws for Progress are to improve behaviour, increase engagement in education, develop employability skills, and enhance well-being. Using a mixed design with two control groups and triangulating quantitative and qualitative outcomes, the evaluation assesses the efficacy of the programme in meeting these aims.

Systematic analyses of semi-structured interviews pre and post participation in the programme support findings from the quantitative analyses. Analyses of institutional behaviour, measured by Disciplinary Reports, educational progress measured by written assessments and qualifications, employability skills measured by psychometric tests, and prisoner well-being all improved for participants, but such improvements were not shown by control groups. Paws for Progress positively impacts short and medium term outcomes and data on longer term outcomes also indicate the benefits are far reaching.

By clearly relating programme aims to the outcomes achieved, and considering the contribution of Paws for Progress to future desistance from crime, the value and relevance of these findings are evident. The evaluation contributes to our understanding of effective methodologies in this applied context, which can be

utilised to improve research practice in interventions in criminal justice and in human animal interaction.

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Chapter 1: A critical review of Animal Assisted Interventions (AAI) and prison based Human Animal Interaction (HAI) programmes

Summary

Interactions with animals are associated with a wide range of potential benefits for humans, and Animal Assisted Interventions (AAI) are now used in diverse contexts. In this chapter, the potential benefits of human animal interaction are introduced and the efficacy of AAI is critically reviewed, alongside a consideration of the constraints frequently imposed by applied contexts. Human animal interaction programmes developed specifically in prison environments are then explored further, considering the potential benefits gained by participating inmates. Finally, previous research examining prison based dog training programmes is critically evaluated, including recommendations for research in this field.

Section 1: Introduction

Human Animal Interaction (HAI) is a vital field of research. Humans share this planet with other animals and these interactions are at the core of our everyday lives. Interfaces with other species are a necessity across all human cultures and the diversity of these relationships is remarkable; from conflict over resources, exploitation of many kinds, to tolerant coexistence or curiosity, to intense emotional ties to individuals (e.g. Serpell, 1986). For many of us, animals are considered members of our family, both living with us and sharing in our lives. We farm and eat animals, we keep them as working companions (e.g. guide dogs), as models for humans in laboratory research (e.g. disease and toxicology), use them in therapeutic contexts, and in education, entertainment and ecotourism. Depending upon our perceptions and attitudes towards animals, and in relation to their impact on us and the environment, we may actively attempt to understand them, conserve them, domesticate them or eradicate them (e.g. Kellert, 1983). Despite the ubiquitous nature of human animal interactions, and research that falls under this umbrella term, interdisciplinary links are rarely made, providing an incomplete understanding of the interactions, and the mechanisms underlying their costs and benefits. However, the recent growth in interest in the study of human animal interactions in terms of potential practical benefits to both parties suggests this situation is beginning to change (e.g. Amiot and Bastian, 2014).

Mutually beneficial relationships and interactions with animals have a very long history; archaeological evidence shows domesticated wolves, the ancestors of dogs, were the first species to transfer from 'wild' to domesticated status, somewhere between twelve – fourteen thousand years ago (Serpell, 1986), although recent DNA evidence suggests the domestic dog may originate from much earlier (33,000 years ago; Druzhkova et al, 2013). Dogs and humans were buried together in Germany about 14,000 years ago, strongly indicative of the formation of reciprocal and close relationships between humans and non-human animals. Dogs have been bred to co-exist with us, filling many roles throughout our history up to the modern day, for example, as companion animals with pet keeping now the norm (Serpell, 1996). The potential benefits of such relationships were recognised in the early modern period and were applied to therapeutic environments and the treatment of mental illness, for example, by the York Retreat in England (1792) and later in Bethel in Germany

(1867). However, scientific medicine largely displaced animals in therapeutic settings until companion dogs were introduced to convalescing military personnel in the Air Force Hospital in New York in 1940. Internationally, companion animals were included in psychotherapeutic treatment programmes from the early 1960's onwards (Levinson, 1969). In recent decades, interest in the potential benefits of these positive interactions with companion animals has significantly increased (e.g. Griffin et al, 2011).

Emotionally positive interaction with companion animals is beneficial to humans, both physiologically and psychologically, and is particularly effective in enhancing interpersonal communication and reducing stress and anxiety (Serpell, 1986; Beck and Katcher, 1996). Even the presence of an animal may be effective in reducing anxiety in stressful situations (Edney, 1995; Morgan, 2008). Periods of interaction with a dog decrease blood pressure (Friedman et al, 1983, 1993; Allen et al, 1991), raise levels of neurotransmitters associated with positive social emotions (Odendaal and Lehmann, 2000), and increase levels of the neuropeptide oxytocin (involved in social bonding and affiliation, and effective in reducing depression and anxiety, Nagasawa et al, 2009). Dogs also enhance social contact (McNicholas and Collis, 2000) and facilitate communication, effectively providing a 'communication bridge' by which individuals who have difficulties communicating may be reached (Levinson, 1969; Corson et al, 1977; Kruger and Serpell, 2006; Ormerod, 2008). Animal Assisted Interventions (AAI) recognise the ability of animals to serve as catalysts or mediators of human social interactions, assisting in therapeutic processes by simultaneously relaxing and engaging the patient (Kruger and Serpell, 2006).

The profound positive impact which companion animals can have on human mental and physical health has led many to believe that "Pets are good for us" (Wells, 2009) and there is increasing attention on why this may be the case. The 'human-animal bond' (HAB) has been identified as a mutual and dynamic relationship between people and animals. Frequently, the persistent reciprocal, trusting relationships which develop between humans and non-human animals are described as fulfilling this bond and research considers the way these interactions affect health and wellbeing. There are a number of theories regarding why HAI and the HAB may be beneficial to humans. An early theory introduced by E.O Wilson (1984) was the concept of 'Biophilia', which proposed that a fundamental aspect of human nature is

our innate affinity for life and lifelike processes. According to these principles, our inherent affinity for animals and nature is explained by the long evolutionary history of our close interaction and mutual dependence between humans and other animals. Such an explanation is often offered for the human tendency to prefer and benefit from time spent in natural landscapes and this underpins enterprises such as Green Care projects (DeLoache et al, 2011). More recently, the animate-monitoring hypothesis similarly suggests that paying particular attention to animals (including humans) is an evolved tendency due to their biological relevance, in terms of both opportunities and dangers with respect to our survival. This hypothesis is supported by research involving young infants that demonstrates an innate predisposition to pay more attention to and prefer animals to objects, on the basis of both static and dynamic features (DeLoache et al, 2011).

Both the Biophilia and animate-monitoring theories offer plausible explanations for the human tendency to pay attention and potentially favour interactions with animals. However, further exploration is needed to determine why interacting and developing close reciprocal bonds with companion animals appears to be particularly beneficial to humans. Early approaches related the HAB to Attachment theory (Bowlby, 1980; Ainsworth, 1989), suggesting that in our relationships with companion animals, pets represent significant attachment figures and provide non-judgemental confidants and unconditional positive regard (Sable, 2013). The social support provided by positive attachments to companion animals may be crucial and there is evidence for the potential social buffering effects of HAI (Wood et al, 2005; Beetz et al, 2013). Companion animals can provide stress-reducing social support (Serpell, 1996) and negate the unpleasant effects of experiencing loneliness or isolation. A lack of social support leads to increases in stress and an ensuing predisposition to disease and deterioration of health (Giles et al, 2005). The increasing number of people living alone in modern society is associated with the recent growth of the pet population, potentially providing an interesting countering effect against the potential risks linked to loneliness. Animals can also induce a state of relaxation (e.g. Katcher et al, 1983) and provide opportunities to touch and care for another, stimulating reactions important in humans (Beck, 2002) and helping us adapt to difficult situations. Evidence indicates that the benefits of social support provided by dogs are similar to the benefits of receiving human social support (Allen et al, 2002). Following this concept through would suggest that vulnerable people

who are at risk of isolation may benefit the most from HAI. The human benefits gained are often multifaceted, for example, interaction with dogs in particular is both an effective stress reducer and also has a positive impact on the quality and quantity of social interactions (Serpell, 1996; Olmert, 2009).

In general, interactions with companion animals are associated with a range of positive health behaviours (e.g. increased levels of exercise with dogs) and health outcomes (e.g. improvements in cardiovascular responses). Although the exact mechanism responsible for these benefits is not yet clear, emerging findings are providing compelling insights into the physiological underpinnings of the positive health effects associated with HAI. The hormone oxytocin is released during positive and close human-human interactions, for example, between humans with close social bonds such as parent and child, and is likewise released during positive human-dog interaction (Nagasawa et al, 2009; Uvnas-Moberg et al, 2011; Beetz et al, 2012). In both of these situations, the release of oxytocin is thought to be associated with increased positive social interactions and a stress buffering effect. An important function of oxytocin is to lower the levels of the arousal hormone cortisol, which is active as we respond to both emotional and physical stressors. Chronic increased levels of cortisol are linked to decreased immune function, increased cholesterol, increased stress reactions to pain, mental ill-health, and psychosocial stressors; the reduction in cortisol provided by oxytocin can therefore have a significantly positive effect on our health (Uvnas-Moberg et al, 2011).

A systematic review of the effects of HAI on psychosocial variables and on human physical and mental health (including different age groups, with and without special medical or mental health conditions) identified improvements in: social attention, social behaviour, interpersonal interactions, mood; stress-related parameters such as cortisol, heart rate, and blood pressure; self-reported fear and anxiety; and mental and physical health, especially cardiovascular diseases (Beetz et al, 2012). Beetz et al (2012) conclude that the effects of HAI overlap considerably with those of oxytocin activation, indicating that the common underlying mechanism for the majority of the positive effects of HAI relates specifically to the activation of the oxytocinergic system and its role in social stress modulation. This system can be linked directly to many of the observed physiological effects of HAI and is likely to also be indirectly associated with the ensuing positive psychological effects. The "social catalyst effect" of HAI in

facilitating positive interpersonal interactions is well documented, and is likely also related to the activation of oxytocin. The reduction of subjective psychological stress (fear, anxiety) due to animal contact, as well as the dampening of physiological stress parameters in connection with activation of the oxytocin system, may represent a core mechanism underpinning the positive effects of HAI. As noted above, these psychological and physiological changes have also been linked to other constructs, such as biophilia, attachment theory, and social support theories, by a large body of studies that focus on stress regulation via social support (Wills, 1991) and via bonds within one's own species (Julius et al, 2012). The most frequently cited factors in research on HAI include the love and acceptance which animals provide to owner and clients within animal assisted interventions and enhanced social interaction; activation of the oxytocin system is implicated in both emotional bond formation and the social catalyst effect. Therefore, a theoretical approach based on the impact of the activation of oxytocin via HAI (upon both psychological and physiological responses) allows for the integration of several theoretical approaches and accommodates the various beneficial effects reported to date (Beetz et al, 2012).

Definitions in Human Animal Interaction (HAI): Animal Assisted Interventions (AAI)

As our awareness and understanding of the potentially beneficial effects of HAI has increased, animals have been increasingly involved in a range of health, social and educational contexts (Griffin et al, 2011). Numerous terms are used to describe the intentional inclusion of HAI in service provision, many of which show a tendency to describe any form of HAI as therapeutic. LaJoie's (2003) review found 20 different definitions of animal assisted therapy, and 12 terms used to describe the same phenomena (e.g. pet facilitated therapy, pets as therapy, animal facilitated counselling, animal co-therapists). However, Beck and Katcher (1984) are critical of the conclusion that any HAI experienced by a patient is a kind of therapy and propose a clear distinction between an emotional response to animal (described as recreational use) and therapy. Due to the numerous terms employed, clarification of terminology has been required to differentiate these in relation to different programme models and aims (Beck and Katcher, 1984; Delta Society, 1996; Kruger and Serpell, 1996; Pet Partners, 2015; IAHAIO, 2014).

The International Association of Human-Animal Interaction Organizations (IAHAIO) is "the global association of organisations that engage in practice, research and/or education in animal assisted activity, animal assisted therapy, and service animal training. These activities serve to promote responsible pet ownership, the human-animal bond, and respectful approaches to engaging with animals. IAHAIO has over 60 multi-disciplinary member organisations and professional associations globally." (p3, IAHAIO, 2014). To address the confusion resulting from numerous and various terminologies of AAI and the lack of guidelines regarding those involved, especially concerning the animals, an IAHAIO Task Force was established in 2013. It was the responsibility of this Task Force to clarify and make recommendations on AAI terminologies and definitions, and outline ethical practices for the wellbeing of animals involved.

Animal Assisted Interventions (AAI):

The 'Definitions for Animal Assisted Intervention and Guidelines for Wellness of Animals Involved Task Force' included academics, veterinary medicine professionals, and practitioners from different countries with a background in, or special knowledge in different dimensions in the field of HAI. The following definition of AAI was produced in the resulting IAHAIO White Paper (p5, IAHAIO, 2014):

"An Animal Assisted Intervention is a goal oriented and structured intervention that intentionally includes or incorporates animals in health, education and human service (e.g., social work) for the purpose of therapeutic gains in humans. It involves people with knowledge of the people and animals involved. Animal assisted interventions incorporate human-animal teams in formal human service such as Animal Assisted Therapy (AAT), Animal Assisted Education (AAE) or under certain conditions Animal Assisted Activity (AAA)."

The general consensus is that Animal Assisted Therapy (AAT), Animal Assisted Education (AAE) and Animal Assisted Activities (AAA) are all forms of AAI. In all these interventions, the animal may be part of a volunteer therapy animal team working under the direction of a professional or an animal that belongs to the professional (IAHAIO, 2014; Pet Partners, 2015). The definitions provided below are used to differentiate between these approaches (p5-6, IAHAIO, 2014):

Animal Assisted Therapy (AAT): AAT is a goal oriented, planned and structured therapeutic intervention directed and/or delivered by health, education and human service professionals. Intervention progress is measured and included in professional documentation. AAT is delivered and/or directed by a formally trained (with active licensure, degree or equivalent) professional with expertise within the scope of the professionals' practice. AAT focuses on enhancing physical, cognitive, behavioural and/or socio-emotional functioning of the particular human recipient.

Animal Assisted Education (or Animal Assisted Pedagogy): AAE is a goal oriented, planned and structured intervention directed and/or delivered by educational and related service professional. AAE is conducted by qualified (with degree) general and special education teacher. Regular education teachers who conduct AAE must have knowledge of the animals involved. An example of AAE delivered by a regular education teacher is an educational visit that promotes responsible pet ownership. AAE, when done by special (remedial) education teachers is also considered therapeutic and a goal oriented intervention. The focus of the activities is on academic goals, pro-social skills and cognitive functioning. The student's progress is measured and documented. An example of AAE delivered by a special education teacher is a dog-assisted reading programme.

Animal Assisted Activity (AAA): AAA is a planned and goal oriented informal interaction and visitation conducted by the human-animal team for motivational, educational and recreational purposes. Human-animal teams must have received at least introductory training, preparation and assessment to participate in informal visitations. Human-animal teams who provide AAA may also work formally and directly with a healthcare, educator and/or human service provider on specific documentable goals. In this case they are participating in AAT or AAE that is conducted by a specialist in his/her profession. Examples of AAA include animal assisted crisis response that focuses on providing comfort and support for trauma, crisis and disaster survivors, and visiting companion animals for 'meet and greet' activities with residents in nursing homes.

It is worth noting the distinctions between forms of AAI according to these definitions. Firstly, both AAT and AAE are considered as goal oriented, whereas AAA can be more informal or spontaneous. Secondly, AAT and AAE require that relevant outcomes are measured, documented and evaluated, whereas AAA does not require

such evaluation. Thirdly, AAT and AAE are delivered by professionals with expertise in the respective related fields, whereas AAA may be delivered by specially trained professionals or volunteers. However, the requirement for an animal that meets specific criteria for suitability is not referred to here, whereas previous guidelines (Delta Society, 1996; Kruger and Serpell, 2006) mention this criterion for all forms of AAI. Defining the criteria for what constitutes a 'suitable' animal is problematic, as it differs between programme types and settings, as do measures used to assess their suitability.

Types of AAI may also be differentiated by the settings, species of animals involved and the nature of contact. For example, residential programmes (e.g. in care homes) may include visiting pet schemes (in which dogs are most common), and these could be considered AAT if activities involving the animal are goal directed, delivered by a professional and evaluated, or AAA if a specially trained volunteer brings a suitable animal to visit the residents. However, many pet visitation schemes fall short of these requirements because they do not involve special training for volunteers. Alternatively, there may be resident pets (e.g. birds, cats or fish) and these could either be a resident's pet, staff bringing in their own pets to visit, or pets living in a particular communal area. Although these examples all provide opportunities for HAI, whether these should also be considered AAI will depend on the level of planning, the aims of the programme, the involvement of professionals or specially trained volunteers, and the suitability of the animal.

Section 2: Reviewing the efficacy of AAI in various domains

There are numerous potential benefits to humans interacting with companion animals in AAI; however, systematic research in this field has been constrained by the wide range of processes and programmes involved. As a result, Kruger and Serpell (2006) suggested that AAIs are currently best described as a category of complementary practices that are still struggling to clearly demonstrate their efficacy and validity. Nimer and Lundahl (2007) performed a meta-analysis to determine the efficacy of AAT across multiple domains. In this comprehensive search of articles reporting on AAT (up to the year 2004), 250 studies were reviewed, 49 of which met inclusion criteria. Studies were included if they a) reported on AAT and not AAA or

pet ownership, b) included at least five participants in a treatment group, c) were written in English, and d) provided sufficient data to compute an effect size. Large effect sizes were evident in improvements for behavioural difficulties and autistic symptomology, while moderate effect sizes were found for emotional well-being, and for behavioural and medical indicators. However, Nimer and Lundahl (2007) highlight that any inferences from the exploratory moderator analyses conducted are limited by several factors. First, many of the comparisons and effect size groupings lack stability as they are based on very few studies (i.e. <4). For example, only two studies contributed effect sizes to the well-being outcome for the 13-17 year old age category. When few studies contribute to a specific outcome for a particular moderator variable, there is lower confidence in the value; if only a single study contributes (e.g. aquatic animals for the well-being outcome), meta-analytic procedures and interpretations are inappropriate. Given these caveats, in some cases moderator analyses serve to generate questions rather than answers.

From the AAT studies included in this meta-analysis, dogs were involved most often, and AAT most often targeted mental health concerns. In addition, AAT was used more with adults compared to youths (inferences regarding AAT for youths are therefore limited). The data suggest that animal type seemed to matter; dogs in AAT are consistently associated with moderately high effect sizes, which is not the case with all other species. However, contrary to expectations the presenting problem (e.g. medical, mental health, or behavioural) did not appear to influence outcomes. The most rigorous tests of AAT in this analysis came from four studies that compared AAT with another treatment (e.g. exercise, recreational therapy). Positive effect size values indicate AAT was superior, while negative values indicate the opposite, and an effect size near zero suggests equal effectiveness. In the first study, Marr et al (2000) compared AAT for behavioural problem patients with an exercise intervention and found that those involved in AAT interacted more with other patients (d=0.65) and smiled or showed more pleasure (d=0.68). Examining interaction patterns among older individuals in a psychiatric inpatient setting (Haughie et al, 1992), AAT had a more desirable social interaction pattern compared with a photography group (d=0.41). However, in a long-term residential facility with older adults, AAT was just as effective as recreational therapy (d=0.00) in promoting positive social interaction behaviours (Bernstein et al, 2000). Lastly, Holcomb and Meacham (1989) reported that an AAT therapy group (Hug-a-Pet) delivered in an inpatient psychiatric setting

boasted higher attendance than other therapy groups (d > 1.0). Nimer and Lundahl (2007) conclude that overall, AAT shows promise as an additive to established interventions and that future research should investigate the situations under which AAT can be most beneficial.

Souter and Miller (2007) conducted a meta-analysis to determine the efficacy of AAIs in relation to depression. The inclusion criteria were: utilisation of a control group, random assignment to groups, appropriate measure of depression, and reporting sufficient information for calculating effect sizes. Only five studies were eligible for inclusion. The results indicate that AAI produced a significant reduction to depression symptomology, with a moderate effect size, providing promising evidence for AAI in the treatment of depression. DeCourcey et al (2010) reviewed studies relating to the efficacy of AAI in delivering health benefits (psychological and physiological) for critically ill patients. This review identified multiple indications of positive effects of participating in AAI for the patients, including relieving stress, anxiety and boredom, improving mood, and indicators of improved well-being such as reduced blood pressure and heart rate. While the effects identified were all positive, the authors highlight that AAI may not be beneficial for everyone, and it is therefore important that further research identify mechanisms and conditions under which it may have the largest positive effects.

Rosetti and King (2010) reviewed evidence examining the efficacy of AAT for psychiatric patients and suggest AAT can have a positive effect on a range of psychological and social outcomes (including reductions in depression, anxiety, distress, and anger) and generates positive social experiences, facilitating social interactions. More recently, Maujean et al (2015) conducted a systematic review of Randomised Controlled Trials (RCT) to determine the efficacy of AAI on psychosocial outcomes. The inclusion criteria were: a) only original published journal articles examining the effects of AAI on psychological / social outcomes; b) AAI was provided and described clearly; c) the study design was an RCT; d) the article was specific to AAIs (e.g. rather than pet ownership). Only seven of the 270 relevant studies identified met inclusion criteria (none of which were in prison environments), highlighting how rare RCTs are within this applied context and research field. Overall, the findings suggest AAIs may benefit a wide range of people, including children on the autism spectrum and adults with psychological disorders. Again, the relative lack

of well-designed research is identified as a barrier to advancing our understanding of which types of AAI are most effective for specific populations.

To summarise, there is general agreement that previous research has largely provided evidence of a range of benefits associated with AAI and AAT. However, there has also been disparity between the proliferation of programmes and the number of rigorous studies conducted. There are clearly challenges evaluating outcomes across diverse programmes (in terms of format, length, measures etc.), different applied contexts and different populations with distinct needs. Many reviews are critical of the low numbers of RCTs, which are generally considered the most robust method employed to evaluate efficacy; however, it is also worth considering whether RCT is always the most appropriate design, given most studies of AAI and AAT involve small samples across a wide ranging applied contexts (which may preclude appropriate randomisation and blinding procedures). Furthermore, the RCT is criticised for lacking ability to uncover what is really happening underneath the surface of events and enable findings to be translated to 'real' practice (e.g. Blackwood et al, 2010). The suitability of alternative evaluative frameworks and research designs are explored in depth in Chapter 3, in relation to the choices made in the development and evaluation of Paws for Progress.

Johnson et al (2002) discuss issues associated with conducting research in AAI and suggest these include: gaining research access to clinical / institutional settings; following (lengthy) appropriate procedures in gaining review board / ethical approval; zoonotic concerns and risks of animal related incidents; recruiting an appropriate sample; selecting appropriate measures and methods; and successfully implementing the study. Their recommendations include:

- research access may be easier in settings where some form of AAI programme is already in place, and gaining support at all levels within the institution (and addressing potential concerns) is essential;
- allow time to carefully develop the study protocol with full consideration of ethical concerns, risk assessment and policies (e.g. animal welfare, infection control);
- full awareness of risks (and relevant literature to address concerns) and how to minimise these by following appropriate guidelines and protocol;

- recognising that while fully randomly selected controlled samples are desirable, these may be nearly impossible to achieve in applied contexts, particularly if time / resources are limited; researchers should allow time to plan their recruitment and selection procedures carefully (and report these in full) in relation to the study design;
- consideration of measures that are less labour intensive (such as observations of behaviour), particularly where multiple data collection points occur (to minimise negative effects for participants);
- the great importance of testing practicalities and methods in a pilot study, the need to minimise efforts required of institutional staff in the study, the needs to consider potential confounds (such as the likelihood of contamination across study groups, or the effects of other concurrent interventions / events) and careful planning to minimise logistical issues (e.g. with over burdening animal handlers / animal selection processes).

Clearly, there are many critical questions yet to be answered; determining the range of populations/settings for whom AAI is most effective, and the most appropriate 'dosage' in terms of timing, frequency, length and content (Johnson et al, 2002). While the differential effects of varying types of interaction and species of animal are not yet clear, it does appear that dogs are the species most regularly involved in AAI, and potentially, that interaction with dogs may be the most beneficial (e.g. Nimer and Lundahl, 2007). Next, we explore human animal interaction in the specific applied context of the custodial environment, and review evidence in support of Prison based Animal Programmes (PAPs), which again most commonly involve dogs.

Section 3: HAI programmes in prisons

There are numerous Prison based Animal Programme (PAP) designs being used in prisons in the USA (Lai, 1998; Furst, 2006). According to Furst's (2006) review, the community service model is the most common programme design, in which animals (usually dogs) are rehabilitated and then adopted out into the community. Service animal socialisation programmes, in which participants socialise and train young dogs to work towards more advanced training (e.g. assistance dog training), are the second most frequent. Vocational programs, in which participants gain certification /

accreditation (in skills such as animal management) are typically used in conjunction with other programme designs; Multimodal programmes which combine vocational and service animal socialisation components are the third most frequent PAP model in use. Alternative programme models include wildlife rehabilitation programmes (caring for injured wildlife prior to re-release) and livestock care programmes, and less intensive programmes that are more similar in nature to AAI in other settings such as pet adoption and pet visitation programmes.

> *"In all of the programs discussed in this article, adult or juvenile offenders learn new skills while being engaged physically, mentally and most often emotionally. The animals can facilitate a change within the individual which cannot easily be matched by traditional method."* (p59, Deaton, 2005).

Typically, HAI programmes in prisons involve prisoners caring for and training dogs; most commonly involving dogs from rescue shelters, to prepare the dogs for rehoming (Lai, 1998; Furst, 2006). Inmate participants gain personal insights and increased self-esteem through the achievement of targets and goals with the dogs (Merriam Anduini, 2000; Dalton, 2004; Ormerod, 2008). This enhances participants' personal development, by increasing problem solving abilities and empathy, encouraging teamwork, enhancing social skills, and recognising the positive impact of pro-social behaviour (Meriam, 2001; Dalton, 2004; Currie, 2008; Arluke, 2010). For young offenders, and particularly those who suffered emotional and physical abuse from caregivers, canine companions provide social comfort and help to re-instil trust and confidence in others (Harbolt and Ward, 2001; Merriam, 2001; Currie, 2008; Arluke, 2010). Arluke (2010) suggests that participants in PAPs are discovering and practising positive new ways of thinking, feeling and behaving, through their experiences training dogs. Although not previously used in prisons in the UK, dog training programmes have seen increasing popularity in prisons in the USA, Canada, Europe and Australia (Lai, 1998; Furst, 2006; Mulcahy and McLaughlin, 2013).

Dog training PAPs differ from AAI with other populations in several respects. The key difference is that the animal is not present only for the therapeutic benefit of the prisoner and is not used in conjunction with clinical therapy methods (Lai, 1998; Furst, 2006). In addition, the prisoner not only interacts with the animal but typically cares for, works with or trains the animal as well (Furst, 2006). This is not to say, however, that PAPs do not have treatment effects or successful measurable outcomes

for the prisoners who participate; rather, these programmes appear to allow both inmates and animals help each other toward mutual rehabilitation. In addition, the PAPs can offer benefits to the wider community, to offer a potential win-win-win situation (Furst, 2006). PAPs have received highly positive reports in the USA; Furst's (2006) survey revealed that of the 46 states which responded, 36 states have at least one PAP design currently in use, representing a total of 159 correctional sites. While survey respondents overwhelmingly regarded programmes as positive, Furst (2006) identified a lack of empirical investigation to demonstrate their efficacy. Early reports regarding PAPs reported improvements in the inmates' cooperation with staff, improvements in self-control and self-esteem, an increased sense of autonomy and enhanced prospects of employment upon release (Strimple, 2003; Furst, 2006; Ormerod, 2008). Staff at these prisons regularly experience benefits to working conditions due to improvements in inmates' attitudes and behaviour, improved staff-inmate relationships, and the positive effects of animals' presence upon the prison atmosphere (Lai, 1998; Richardson-Taylor and Blanchette, 2001; Ormerod, 2008). In the service animal socialisation model, animals are trained to assist people; by engaging inmates in positive work which benefits society, these programmes were perceived to have improved relationships between prisons and communities. Moreover, in Community Service programmes, the effective rehabilitation and reintroduction of these animals into the community delivers additional positive outcomes; both improving welfare for animals involved and addressing the problem unwanted animals present to society (Strimple, 2003). In both models, although parting with dogs after periods of care and training can be distressing to inmates, the opportunity to 'give' something back is perceived as a personal gain, in that it represents a worthwhile contribution to society by helping others (Strimple, 2003; Furst, 2006; Ormerod, 2008). McNeill and Maruna (2007) propose that the development, encouragement and facilitation of opportunities to help others should be at the heart of effective practice with offenders; if we want to encourage offenders to 'give up' crime, we must provide opportunities for them to 'give back'.

Dogs participating in community service programmes

Unwanted dogs which are placed in rescue shelters face a stressful and uncertain future. A third of the dogs relinquished to rescue shelters are abandoned due to perceived behaviour problems (Wells, and Hepper, 1992; Wells, 1996), and the levels

of stress which accompany the shelter environment are likely to exacerbate these problems (Hennessy et al, 2002; Tuber et al, 1999). In other words, even if a dog does not arrive at a shelter with a behaviour problem, it is likely to acquire one (Tuber et al, 1999). If dogs who are acquired from rescue shelters display behaviour problems in their new home, this frequently results in their subsequent return to the shelter (Wells and Hepper, 2000). Although rescue shelters aim to address behavioural problems, this is constrained by the time or resources available to identify and then modify behaviour, when the priority for the organisation is to rehome dogs quickly to allow space for another animal in need. Often, undesirable behaviours are retained in their new homes, where new owners may not be able to satisfactorily deal with sometimes complex issues (Wells and Hepper, 2000). Problematic behaviours are also thought to be indicators of compromised welfare, both caused by and resulting in symptoms of anxiety, and can subsequently be a long term cause of distress, to both the owner and the dog (Hiby et al, 2004).

Although the successful rehabilitation and rehoming of dogs relinquished to shelters is extremely challenging, an increased understanding of the relationship between humans and dogs has the potential to facilitate an increase in positive outcomes (Tuber et al, 1999). For example, when placed in a novel or threatening environment, dogs find the presence of a human companion more effective than even a canine companion in reducing behavioural and physiological signs of stress (Tuber et al, 1999). This is a particularly interesting parallel, given the positive behavioural and physiological effects which contact with dogs can have upon people, in alleviating signs of tension and stress (Beck and Katcher, 1996). Periods of human interaction can alleviate both behavioural and physiological signs of stress in shelter dogs (Hennessy et al, 1998, 2002) and appear integral to improving their welfare. Furthermore, providing even basic training can greatly increase shelter dogs' adoptability and may be instrumental in reducing rates of relinquishment to shelters (Tuber et al, 1999; Normando et al, 2006, 2009; Leuscher and Medlock, 2009).

There is evidence that human interaction is similarly beneficial for shelter dogs engaged in a PAP aimed at enhancing their socialisation and improving their behaviour. Dogs at a Humane Society facility were assigned to either a 'control' or 'socialisation' treatment group to assess the impact of the living in the institutional environment and being trained by inmate trainers (Hennessy et al, 2006). Both

groups were administered a pre-test assessment including blood withdrawal for hormone analysis, assessment of responses to commands, and observation of behaviour in a novel situation. Dogs in the socialisation treatment were then transported to the prison where they lived with and were trained by the inmate handlers (for 3 weeks) before both groups were administered the post-test assessment. There were no pre-intervention differences between groups but in the novel situations post-intervention only the socialisation treatment group demonstrated significant improvements in both compliance with commands and behaviour. Plasma cortisol levels did not vary from pre-test to post-test in either group, which was considered to be due to complexities in effects of chronic shelter housing conditions on the regulation of the HPA axis in dogs and issues with the methods of measurement. Overall, these findings indicate that socialisation programmes facilitate positive behavioural outcomes for shelter dogs, in addition to alleviating potential concerns relating to the impact of the prison environment upon their welfare (Hennessy et al, 2006).

Prison based animal programmes in the UK

Considering the high prevalence of dog training PAPs in the USA and Canada, it is surprising that such programmes have not received comparable interest in the UK. Nonetheless, other forms of PAP have been used in UK prisons; a survey in 1989 found that 51 of 156 establishments were engaged in programmes involving animals. Comments from prison Governors and staff were positive regarding the beneficial effects of these programmes (Ormerod and Whyham, 1997). A similar survey conducted in 1995 in England and Wales demonstrated that such work was continuing, although the lack of planning, targeted work and evaluations was also highlighted as a constraint on further development (Ormerod and Whyham, 1997). The majority of the UK PAPs involved pet keeping (birds or fish) but there were others involving service to the community, such as assisting with riding for the disabled or at animal sanctuaries. There have been successful programmes involving animals in Scottish prisons previously, particularly within the special units (e.g. HMP Shotts; Ormerod, 2008). Best practice involves combined careful planning, effective implementation and evaluation. There are several examples within the UK, such as the Community Services Aquatic Club (HMP Edinburgh) and the Garth Prison Pet Programme (Lancashire); both have reported very positive psychosocial and

behavioural outcomes (Whyte, 1987; Ormerod and Whyham, 1997; Lai, 1998; Ormerod, 2008).

There was a particular prevalence of successful PAP collaborations within the Scottish Prison Service (SPS) between the late seventies to mid-nineties (Whyte, 1987; Ormerod and Whyam, 1992; Ormerod and Whyham, 1997; Lai, 1998; Ormerod, 2008). Whyte (1987) describes the progressive partnerships and resulting innovative programmes at HMP Edinburgh and considers their benefits in relation to the care of prisoners and to the community. The Community Services Aquatic Club (the fish project) developed as a result of a partnership between the Adult Education Unit at HMP Edinburgh and the University of Stirling Institute of Agriculture in 1978. As there was a growing interest in fish through evening classes in tropical fish keeping, this project aimed to channel the prisoners' interest and engagement to bring benefit to the wider community. Prisoners bred and supplied young tilapia and catfish for the University's fish farming research work, thereby linking a university research programme with the progression of long term prisoners, who were considered a fundamental part of the research team. The resulting project received considerable public support (it was the subject of seven television programmes and countless radio and press articles, within a two-year period) and by the time of Whyte's (1987) article the project was breeding up to 150, 000 young tilapia per year, with stock distributed internationally. The project contributed significantly to knowledge of the behaviour and breeding of tilapia, before progressing onto research and breeding of freshwater prawns, farmed to boost local and national economies of third world countries (Whyte, 1987).

Long term prisoners at HMP Edinburgh were also crucial to the development of their aviary, which Whyte (1987) reports housed approximately 50 birds (canaries, budgies and quail), and was self-sustaining through the sale of birds, while also providing birds to the elderly as companions, thereby enhancing community benefit.. However, Whyte (1987) notes that the keeping of birds as pets for prisoners (within their cells) which was popular practice in England, Wales and across Europe, was not generally permitted in Scotland. Another innovative project was developed by the Adult Education Unit at HMP Edinburgh and Edinburgh Zoo, and included a zoo support unit at the prison (producing information leaflets, and contributing towards breeding and enrichment programmes) and providing educational work programmes

for prisoners within Edinburgh Zoo. This project again reported benefits to both the prisoners and the community. Unfortunately, there is little information available publicly regarding the fish or zoo projects continuity at HMP Edinburgh in recent years, which suggests the programmes have since diminished or discontinued operations, highlighting issues of sustainability for PAPs. However, HMP Edinburgh has recently become the only prison in Scotland to have a poultry project, aptly named 'The Henitentiary' (McCann, 2014). Free range birds (19 laying hens and one rooster) are cared for by female prisoners, with guidance from the regimes officer who developed the project. Chicken sheds were built by prisoners in the carpentry workshop, droppings from the birds are being used as fertiliser in the prison gardens, and the eggs produced by the chickens are cooked in the prison's life skills workshops and are also distributed from the visitors' centre. The women involved have the opportunity to gain a City and Guild qualification in animal care.

Keeping farm animals within Scottish prisons was previously more common. Whyte (1987) described a dairy herd (60-90 cows) at HMP Noranside and a poultry programme at HMP Penninghame but both of these Open Prisons no longer exist. Ormerod and Whyam (1992) conducted a survey of all Scottish penal establishments and found that sixteen of the twenty-one secure establishments (76%) currently had programmes involving animals. HM YOI Polmont was the only establishment to house longer term prisoners that did not have any involvement in animal programmes; the remaining four establishments without PAPs were short stay establishments (remand centres and short term sentences). Ormerod and Whyam (1992) visited six establishments in Scotland and reviewed their animal programmes, to provide further detail in their survey: HMP Perth, which had a very successful fish project; HMP Penninghame, which assisted with the activities of Riding for the Disabled, and had an exemplary aviary; HMP Noranside, which at that time had a herd of over one hundred cattle, an aviary and both tropical and cold water fish aquariums; HMP Dungavel, which had a children's petting zoo (rabbits and guinea pigs), an aviary and a pigeon loft ; HMP Barlinnie Special Unit which had pet cats and a pigeon loft; and HMP Shotts Alternative Unit, which had a range of companion animals including budgies, lovebirds, tropical fish, gold fish, snakes, a rabbit, and a cat. Across all establishments the level of care provided to the animals was reported to be exemplary and the benefits gained by prisoners were wide ranging and diverse (Ormerod and Whyam, 1992). Recurrent themes included those common to HAI and

also some that are specific to the custodial context: opportunities for care and nurturing, true and unguarded companionship and affection, diversion of attention from the self into the care of another, empathy, uncritical non-judgemental response, reducing institutionalisation / providing normalisation in the prison environment, restoring contact with the community, recovering feelings of worth and confidence which may have been lost, development of valuable skills relevant for employment, and providing benefits to the working conditions of prison staff.

Section 4: Research and evaluation: HAI prison based dog training programmes

Despite a long and successful history of PAP in custodial contexts in the UK, dog training PAPs, considered to be particularly effective with prison populations in other countries, have not been replicated here to date (Ormerod and Whyham, 1997; Lai, 1998; Ormerod, 2008). Although the reasons for this remain unclear, potential issues include the considerable resources required to develop, implement and evaluate these more intensive programme designs. The lack of prison based dog training programmes in the UK could also potentially be related to the evidence base in support of the efficacy of these programmes. Many reports detailing the effectiveness of PAPs have been based upon anecdotal descriptions, in which the experiences of particular inmates or staff members participating in the programmes were described. For example, Harbolt and Ward (2001) describe positive effects observed in a Community Service model, which pairs young offenders with shelter dogs to provide basic training and care, both in terms of altering the attitudes and behaviour of youths and improving the dogs' behaviour. Although very favourable in their description of the programme, the need for more rigorous scientific study to demonstrate the success of these programs is also highlighted (Harbolt and Ward, 2001).

The first formal dog training PAP in a correctional institution was established at the Washington Correctional Facility for Women (USA) in 1981 and has since continued and expanded. Although not subject to a formal evaluation, the women involved are reported to have increased self-esteem, improved vocational skills and qualifications, and enhanced employability upon release (Strimple, 2003; Furst, 2006). In a

systematic evaluation of another pilot dog training programme for female offenders in Australia (using pre and post-test measures), participants showed improvements in self-esteem and reduction in depression (Walsh and Mertin, 1994). However, the results were confounded by the participants' awareness of their imminent release at the time of post-intervention measures, potentially biasing responses. The challenges of conducting applied research in the custodial environment are highlighted (e.g. not always possible to maintain a control group and there are multiple variables potentially confounding results).

Another approach is to quantify the success of a PAP using institutional records. For example, participants in the People-Animals-Love (PAL) pet keeping programme had fewer disciplinary offences and a marked reduction in recidivism over a two year period (Moneymaker and Strimple, 1991). Records were available for 88 participants; 11.3% had returned to prison for committing another offence after release, whereas 68% had been successfully paroled (no information provided on the remaining %). There are several methodological issues with this evaluation; there was no control group for comparison, no pre-intervention background information provided, a very limited description of the intervention itself, and data collection procedures were not described in sufficient detail. In addition the results indicated positive outcomes but the data were not clearly reported or tested statistically, which combined with methodological issues limits the interpretation of the evaluation. Finally, while institutional records may provide a more independent measure of outcomes, if used in isolation these cannot provide a valid measure for many aspects that these programmes aim to facilitate (e.g. gaining vocational skills).

The success of another Community Service model in meeting its targets was evaluated by reviewing the perspectives of inmates, staff members, programme coordinators and members of the local community (Richardson-Taylor and Blanchette, 2001). All respondents (including participants, non-participants, staff and community members) reported positive feedback regarding the programme and its success. From a battery of measures used to compare between groups, the programme participants (N=12) had significantly lower loneliness with a (non-significant) trend for lower depression than non-participants (N=11). However, few results achieved statistical significance, which the authors attribute to the small sample size (with high attrition rates largely due to parole) and lack of pre and post-

test measures for comparison. Without pre-test measures, it is difficult to verify whether differences between groups reflect effects of participating or are confounded with underlying differences between groups pre-intervention. Pre/post-test assessments were deemed not possible in practice (although planned); the constraints of conducting applied research in a custodial environment are discussed in relation to these limitations.

Project POOCH (Positive Opportunities-Obvious Changes with Hounds) is a vocational programme which pairs male young offenders with dogs rescued from local animal shelters. This community service programme involves learning to care for and train the dogs to prepare them for adoption in permanent homes and qualitative evaluations of outcomes are highly favourable (e.g. Lai, 1998; Davis, 2007). A systematic evaluation of programme outcomes (Merriam, 2001) comprised three components: a database search to establish the rate of recidivism of previous participants (N=89); a survey of adults working in the establishment (N=48) and a survey of current youth participants (N=10). Youths who participated in the programme were perceived by staff to show marked improvements in their institutional behaviours, particularly in social interactions and respect for authority. Participants reported progress and improvements in empathy, nurturing, self-confidence, pride in accomplishments, and social growth and understanding. The most striking finding was the zero recidivism rate for the 89 participants who had subsequently been released (Merriam, 2001), an impressive record that has been maintained even after ten years until follow up (Dalton, 2004). Given the extremely high rates of recidivism in prison populations and escalating numbers (and costs) of incarcerated individuals, this finding has important implications for the value of rehabilitative interventions (Merriam, 2001; Strimple, 2003). However, the participant survey allowed only for the report of suggested improvements (with potentially leading questions on both adult and participant surveys). Moreover, strict selection processes for participation (involving prior behaviour, treatment and educational progress) leads to a form of sampling bias. Participants must achieve the highest overall institutional rating possible to be selected to participate and are therefore the least restricted in the establishment.

"I feel good, I have had a chance to work at POOCH and because of it I have learned a lot of helpful skills. That will help me in life, but I also feel I was pretty well rounded before

the programme." (Participant Response to Item 44, p74, Merriam, 2001, my underlining).

Merriam's (2001) research recommendations include gaining feedback from a larger sample of POOCH participants, collecting pre/post-test measures, and establishing a control group to contrast and compare behavioural characteristics and progress.

A more recent quasi-experimental study provides evidence consistent with anecdotal reports which attribute success to PAPs. Fournier et al (2007) investigated the effects of a Community Service programme on the criminal behaviour and psychosocial outcomes of adult male inmates. A mixed between and within subject, pre-test/post-test repeated measures design was used; the treatment group (N=24) completed pre-test measures prior to joining the programme, and completed post-test measures after two weeks of participation in the programme. The control group (N=24) met the selection criteria and were on the programme's waiting list. Demographic variables were analysed to measure group differences pre-intervention, to ensure groups were not subject to sampling bias. Criminal behaviour, progression in therapeutic treatment and improvements in social skills were measured by the number of institutional infractions, inmate treatment level within the prison's therapeutic community and a social skills inventory. The results indicated that the treatment group made statistically significant improvements in these measures in comparison with to the control group. The opportunity to participate in PAPs is often an incentive for inmates to improve behaviour, and this is combined with the acquisition of education, skills and increased sense of responsibility and enhanced social skills. This combination of improved engagement and skills and reduction in criminal behaviour is likely to contribute to a reduction in the likelihood of recidivism in the future (Fournier et al, 2007). However, there are a number of limitations, not least the short duration of this study (only two weeks), in addition to the limited measures used and the difficulties in discerning the particular effect of the HAI programme (in comparison with other institutional programmes).

Fournier et al's (2007) study also highlights an important methodological issue in the interpretation of PAP evaluation outcomes. Due to the high prevalence of mental illness in prison populations (estimated to be as high as 15% compared to 2-3% in the normal population; Lamb and Weisenburger, 1998) many previous studies have used clinical symptomatology and psychological functioning as measures of success.

However, Fournier et al (2007) chose behavioural and social variables as outcomes because differences between pre/post-test measures in psychological functioning were expected to show a ceiling effect. Given the screening processes for most PAPs require positive results on tests of psychological functioning prior to acceptance on the programme, it is important to carefully consider programme selection criteria when evaluating the outcome measures employed.

Qualitative Research

Turner's (2007) exploratory study, with six adult male offenders participating in a service animal programme, aimed to gain insight and understanding of participants' experiences, using in-depth unstructured interviews. The interviews focused on three topics; (a) the experience of the participants, (b) the perceived benefits of their participation and (c) the manner in which participants felt the experience had affected them. Cross-case content and thematic analysis methods were used to identify seven key themes: patience; parenting skills; helping others; increased self-esteem; social skills; normalising effect; calming effect on the environment. Turner (2007) uses examples of these themes to discuss how participants relate the benefits of participation to their personal development, their families, the prison environment, and their futures. Overall, many positive effects on the rehabilitation of offenders within the programme were reported within this study.

There are some methodological limitations in Turner's (2007) study; the small sample was obtained by convenience sampling methods and limited to current participants within a single institution (despite other local institutions also running the same programme) and it is unclear how far findings can be generalised. Those participating had been carefully selected following comprehensive screening processes, which further limit conclusions regarding the benefits directly attributable to the programme. However, given the aim of the study was to explore the participants' perceptions and experiences, highlighting those specific areas that seemed to be affected by participation and generating hypothesis for future research, this methodology provided rich descriptive data and was therefore appropriate. In addition, the author cautions against extending these specific findings to other instances or establishments. Research criteria such as generalizability, reliability and

external validity may be less relevant in the evaluation of qualitative research than for quantitative methods (Mays and Pope, 2000). Nonetheless, qualitative approaches are strengthened when researchers 'own their perspective' (recommended for qualitative researchers, Elliot et al, 1999; also termed 'reflexivity'; Mays and Pope, 2000); specifying the researcher's theoretical orientations, previous experience in this area and personal anticipations facilitates a clearer interpretation of the data reported. Similarly, there is no mention of any negative aspects of the participants' experiences (attention to negative cases; Mays and Pope, 2000). As it is unclear whether this type of verification was part of the analysis, the transparency of the data presentation may be questionable. The technique of triangulation of different forms of data would have strengthened the study further (e.g. by also interviewing staff or by making additional observations; Kuper et al, 2008). These weaknesses could be resolved in future research (e.g. as demonstrated by Currie, 2008). However, prior to Turner (2007), qualitative research on this topic was very limited; these were primarily anecdotal reports (e.g. Harbolt and Ward, 2001) or unpublished thesis (e.g. Merriam, 2000; Davis, 2007), thereby justifying their exploratory approach.

Furst (2007) also used qualitative research methods to explore potential mechanisms, namely whether participants in PAPs assign social identities to their dogs, and outcomes in terms of the effects of their relationships with the dogs in terms of desistance from crime. Although the focus differed from that of Turner (2007) similar features were identified within the interview data. These included participants reporting improved patience, a sense of accomplishment, improvements in communication, facilitation of their relationships (including with their families) and providing opportunities to help others. These factors are considered to contribute to the development of a pro-social identity and increase the likelihood of future desistance from crime (Furst, 2007). Davis (2007) used structured interviews to provide insights into the experiences of male young offenders participating in Project POOCH, and again identified very similar themes. Currie (2008) provides a more comprehensive evaluation that conforms closely with qualitative research guidelines (Elliot et al, 1999; Mays and Pope, 2000). A service animal programme was evaluated from five perspectives: inmate trainers; former inmate trainers; non-trainer inmates; staff; and the researcher. The positive emotional and practical outcomes reported for inmate trainers (Currie 2008) confirms and extends previous

findings, providing validation of common themes previously identified on the basis of participant self-report alone (Davis 2007; Turner, 2007).

Section 5: Summary of previous prison based HAI research

Table 1.1 provides a summary of articles reviewing the efficacy of PAPs, detailing programme types, methods, participants, key findings and key limitations. The publication status of studies and data available for review are denoted in the table. Of the fourteen studies of PAPs involving dogs identified in this review, there were significant variations in research design, type of programme evaluated, and participants recruited. Frequently, omissions in the information reported make it difficult to evaluate the evidence and compare studies; missing details are highlighted in the table. Six studies used a quantitative methodology (Lee, 1987; Moneymaker and Strimple, 1991; Walsh and Mertin, 1994; Suthers-McCabe et al, 2004; Fournier et al, 2007; Jasperson, 2013), three used a mixed methods approach (Richardson-Taylor and Blanchette, 2001; Merriam, 2001; Conniff et al, 2005), four were qualitative (Davis, 2007; Furst, 2007; Turner, 2007; Currie, 2008) and one was an anecdotal report (Harbolt and Ward, 2001). Only two studies were conducted outside of the USA (one Australian programme, Walsh and Mertin, 1994; one Canadian, Richardson-Taylor and Blanchette, 2001). Most of the studies' participants were male prisoners; five were conducted in female facilities (Walsh and Mertin, 1994; Richardson-Taylor and Blanchette, 2001; Conniff et al., 2005; Furst, 2007b; Jasperson, 2013). While all these programmes potentially involved dogs, two studies used a range of animals but did not specify the animals involved with each participant (Lee, 1987; Moneymaker and Strimple, 1991), while another allowed participants to interact with a range of animals (Conniff et al, 2005). Most programmes evaluated involved adult prisoners but six studies described juvenile detainees (Harbolt and Ward, 2001; Merriam, 2001; Davis, 2007; Conniff et al, 2005; Jasperson, 2013).

In terms of programmes types, six were community service model (Harbolt and Ward, 2001; Merriam, 2001; Suthers-McCabe et al, 2004; Davis, 2007; Fournier et al 2007; Furst, 2007a), five were service animal model (Walsh and Mertin, 1994; Richardson-Taylor and Blanchette, 2001;Turner, 2007; Furst, 2007b; Currie, 2008), two were pet keeping/ care programmes (Lee, 1987; Moneymaker and Strimple,

1991; although limited information was provided on both these programmes) and two were pet visitation programmes (Conniff et al, 2005; Jasperson, 2013). The stringent selection processes for the programmes described in thirteen studies mean that sampling bias is a limitation, for all but the anecdotal report (Harbolt and Ward, 2001). The two studies which examined pet visitation programmes (Conniff et al, 2005; Jasperson, 2013) described limited evidence of beneficial effects, which could be due to brief (one hour, over a maximum of 8 weeks) and limited contact with the dog within these programmes (with large group sizes of 10 for a single visiting dog). These latter two studies were also the only ones to randomly assign participants to the HAI or control condition and this may have also impacted upon the findings reported, as it does not allow participants' individual preference for HAI to be taken into consideration.

Table 1.1: A summary of previous prison based HAI research. Studies are listed chronologically within the general categories of quantitative, mixed and qualitative methods (* = sources not subjected to formal peer review, such as institutional reports, conference abstracts and unpublished theses). For each study, the methods, participants, measures, key results, and limitations are briefly described (? = relevant details were not reported.)

Section 1: Predominantly Quantitative Methods					
Author (year) PAP type (location)	Design and Method	Participants (N)	Measures	Key Results	Key Limitations
Lee (1983; 1987)* Pet-keeping and mental health (Lima State Hospital for the Criminally Insane, now Oakwood Forensic Centre, USA).	Between subjects: Treatment and control group. Evaluated over 1 year. Procedures and methods not reported.	Male adult inmate patients: Pet keeping treatment (N =?) and control group (N=?) with no access to pets.	Medication level, incidents of violence and suicide attempts.	Medication level declined to half that of the control group. Significant reductions in violence, and in suicide attempts (e.g. treatment =0: control =8).	No pre/post-test. Very limited information provided, such as number participants and whether groups differed at baseline. Not possible to evaluate overall impact.
Money-maker and Strimple (1991) PAL - caring for a range of companion animals (details?) (Lorton Correctional Facility, USA).	Descriptive only: no controls. Evaluated over 2 years. Data collection procedures not clearly reported.	Male adult inmates in the PAL programme (N=98, of which N=88 valid cases?).	Programme activity, removals due to rule violations, incarceration status, drug use, current status.	Nearly two thirds were active/ very active participants (only 12% terminated for rule violations). Reduced recidivism based only on unclear data: "Ten, or 11.3% of the 88 valid cases later returned to prison… while 86 or 97% never returned to prison"?	No pre/post-test or control groups. Very limited information on research design and methods. Reporting of data is inconsistent / conflicting (with no formal analyses). Not possible to evaluate overall impact.
Walsh and Mertin (1994) Service animal training (PAT dogs) (Australia).	Within subject design: Pre and post-test measures. Evaluated over 1 year.	Female adult inmates (N=8).	Coopersmith Self-Esteem Inventory IPAT Depression Scale (mean interval = 6mths).	Significant improvements in self-esteem and depression (but 6/8 participants scored in normal range pre and post for both measures).	No control group. Results potentially confounded by the participants' awareness of their imminent release at post-test (when leaving programme).

Author (year) PAP type (location)	Design and Method	Participants (N)	Measures	Key Results	Key Limitations
Suthers-McCabe et al (2004)* Community Service model (programme name? USA).	Within subject design.	Male adult inmates (N=16).	Clinical symptomatology and psychological functioning.	No significant differences, with a ceiling effect (mean pre-test scores were normal / healthy range).	No control group. Not reported in detail. Used by Fournier et al (2007) to highlight issues with both selection bias and dependent measures employed in PAPs.
Fournier, Geller and Fortney (2007) Community Service model (PenPal programme, USA).	Mixed between (treatment and waiting list control, same selection criteria) and within subject design (pre-test and post-test). Evaluated over 2 weeks.	Male adult inmates. Treatment and waiting list control groups (both N=24)	Criminal behaviour by institutional infractions, progression in treatment via self-report, and social skills measured using the Social Skills Inventory (SSI). HAI Scale also used.	Demographic variables were analysed between groups to avoid sampling bias. Treatment group evidenced significant improvements in behaviour, treatment progress and social sensitivity (one sub scale on SSI) in compared to control group.	Brief research period. No detail of type / severity of infractions. Limitations with HAI measure used (confounded by contamination / contact with dogs before pre-test). Authors note lack of external validity, programme selection processes limit generalisability to prison population.
Jasperson (2013) Pet visitation, dog present on 8 weekly 1 hour psycho-education group sessions (Utah, USA).	Mixed between (randomised systematic sampling) and within subject design. Quantitative methods.	Female adult inmates (N=74), assigned to attend psycho-education group sessions with a dog present (N=36) or not present (N=38)	The Outcome Questionnaire-45.2, a 45 item self-report measure: change in symptom distress, interpersonal relationships and social role. Pre to post-test interval =8 weeks.	The psycho-education therapy group sessions significantly improved participants' symptom distress, interpersonal relationships and social role performance. No significant differences were found between the groups (i.e. dog presence).	Large group sizes (9-11 to 1 dog) and brief sessions limits level of HAI possible. Participants selected from higher functioning and lower security areas of prison (lower needs). Random selection process does not target those who are most motivated to interact with the animal and who might therefore benefit the most.

Section 2: Mixed methods (quantitative and qualitative)					
Author (year) PAP type (location)	Design and Method	Participants (N)	Measures	Key Results	Key Limitations
Richardson- Taylor and Blanchette (2001)*, Service Animal training (Pawsitive Directions Canine Program, Nova Institution for Women, Canada).	Between subject design (with Control group). Staff survey and interviews. Evaluation over 1 week.	Female adult inmates. Programme participants (N= 12, interviews N=10) and non-participants in same unit (N= 11, interviews N=9). Staff survey (N=16, interviews N=36).	Battery of psychometric tests: Rosenberg's Self-Esteem scale, Depression Scale, Loneliness Scale and a locus of control measure. Sociometric test. Offenders and staff - surveys and interviews.	Loneliness was significantly lower for with a (non-significant) trend for reduced depression (compared to control group). Participants reported gaining personal insights and increased social support resulting from interactions with dogs. 100% of respondents reported positive feedback regarding programme and success in improving participant outcomes. Potentially negative aspects also explored, with recommendations for programme improvements.	Programme details not reported in full. Most results did not achieve statistical significance; small sample size due to high attrition (largely due to parole). Lack of pre/post-test assessments. Potential ethical issues in relation to participating dogs (3 euthanized, one due to inmate trainer leaving the programme?).
Merriam (2001)* Community Service Project POOCH, (MacLaren Correctional Institution Oregon, USA).	Database search. Staff and participant surveys.	Male youth inmates (12-25yrs?). Rate of recidivism of previous participants (N= 89); survey of adults (N=48) and survey of youth (Project POOCH) participants (N=10).	Recidivism from database. Adult survey (24 items) and participant survey (44 items, yes/no responses with 3 open ended responses).	Previous participants had zero percent recidivism. Majority of adult participants responded 'Yes' for: greater respect for authority, improved leadership, self-control, and self-respect. POOCH provides an opportunity for purpose, development of self-worth, production, improved behaviour and social interaction. Youth responded positively regarding educational outcomes and attitudes, and described change in empathy, social growth, confidence and pride of accomplishment.	Selection bias (least restricted youth at establishment, strict selection process). Interval between release and recidivism measure, and recidivism rate for non-participants, not reported. No pre/post-test or comparison. Survey items positively phrased / leading (i.e. did you learn to have greater compassion). Lacks consideration of less successful areas, e.g. how many of youth's responses fit with themes outlined, or attention to negative cases.

Author (year) PAP type (location)	Design and Method	Participants (N)	Measures	Key Results	Key Limitations
Conniff et al (2005) Pet visitation group (New York, USA).	Mixed between (visitation and control) and within subject design. Mixed methods, 2 quantitative measures and qualitative survey for pet visitation group (8 week duration).	Incarcerated female adolescents (13-17yrs). Randomised assignment to pet visitation group (N=12) and control group (N=6) attending usual facility activities.	The Youth Self Report (adolescents' behaviour) and Resident Behaviour Assessment (functioning and progress in institution). Qualitative survey after pet visitation.	No significant differences in measures between groups. Negative changes in YSR for both groups attributed to participants' invalid answers at pre-test (creating a positive impression to gain access to pet visitation). At post-test, the pet visitation was being discontinued which upset many participants. RBA improved for both groups (expected as time at institution increases). Positive qualitative feedback from 11/12 participants.	Failure to detect result is attributed to potentially inappropriate measures, invalid pre-test measures, short term of the study, infrequency (weekly) and brevity (one hour) of pet visitation sessions, fluctuating participation and small sample size. Due to randomised assignment, not targeted towards those most interested in HAI opportunities.
Section 3: Qualitative					
Author (year) PAP type (location)	Design and Method	Participants (N)	Measures	Key Results	Key Limitations
Furst (2007) Two research sites: females in service animal (puppy socialisation) and males in community service programme (USA).	Qualitative research methods / theoretical. Unstructured/ structured interviews (procedures not reported)? Focus groups.	Interviews with adult female (N=15) and adult males (N=7) inmates. Focus group with males (N=14).	Interviews to explore: if participants assign social identities to dogs; the effects of their relationships with the dogs upon desistance from crime.	Participants reported improvements in patience and mood; dogs provided emotional support, sense of responsibility and accomplishment. Improvements in communication and relationship facilitation (including with families). Opportunities to help others, contributing to development of a pro-social identity. Anecdotally reported zero recidivism for female participants; only one removed from programme for misconduct in five years.	Disciplinary or reconviction records not directly assessed (contribution of these factors to future desistance from crime unknown). Participation contingent on maintaining clean institutional record (participants are actively demonstrating desistance from criminal behaviour) but no analysis of whether this differed from pre-intervention levels.

Author (year) PAP type (location)	Design and Method	Participants (N)	Measures	Key Results	Key Limitations
Turner (2007) Service animal model (ICAAN programme, Indiana, USA).	Qualitative – semi structured interviews.	Convenience sample of male adult inmates (N=6) currently participating.	Semi-structured interviews with 3 guiding questions (experiences, benefits and how affected) and additional questions as warranted. Cross-case content and thematic analysis.	Seven key themes identified: patience; parenting skills, helping others, increased self-esteem, social skills, normalising effect, and calming effect on the environment. Participants related benefits to their personal development, their families, the prison environment, and their futures. Findings suggest that participating has positive effects on the rehabilitation of offenders within the programme.	Small sample size limits generalisations. Strict programme selection processes limit conclusions regarding benefits directly attributable to the program's effects. No detail of whether negative aspects of the participants' experiences were also identified in the data.
Davis (2007)* Community Service Model (Project POOCH, Oregon, USA).	Qualitative – structured interviews.	Convenience (currently participating) sample of male young offenders (N=14).	Structured interviews (31 questions) on participants' experiences. Recording frequency of certain responses to questions and content analysis to identify themes.	13/31 questions were analysed. Participants reported positive effects on their relations with staff and peers. Themes identified were patience and responsibility, developing a relationship, work skills of learning and teaching, communication / social skills, and technical skills.	Ratio of research participants to total programme participants is unknown. Limited reflection on those aspects where participants reported no change (i.e. whether a reflection of the question or of an area where the programme did not impact).

Author (year) PAP type (location)	Design and Method	Participants (N)	Measures	Key Results	Key Limitations
Currie (2008)* / Service animal training C.A.R.E programme (Ellsworth Correctional Facility, Kansas, USA).	Qualitative methods, exploring a dog training programme from five perspectives.	Adult male inmate trainers (N=16); former inmate trainers (N=6); inmates never involved in the program (N=3); staff (N=5); and researcher (N=1).	Interviews, video recordings and observations, to determine perceived outcomes of participants. Dog Relationship and Perception Scale administered to 11 participants.	Positive emotional outcomes: social support, sense of pride gained, increased patience, improvement in self-esteem, feeling of giving back to society, humanising element and connection to outside world. Positive practical outcomes: improvement in responsibility, more positive prison environment, opportunities to help others, goal setting and achievement, employability skills gained, motivation, and improvement in behaviour.	Restrictions of custodial context / difficulties maintaining consistency both noted as limitations. Potential bias is discussed and minimised where possible. Participants may not be representative of prison population and so limited generalisability (no background information provided and good discipline included in selection criteria).
Section 4: Anecdotal					
Author (year) PAP type (location)	Design and Method	Participants (N)	Measures	Key Results	Key Limitations
Harbolt and Ward (2001) Community Service Model, (Project Second Chance, New Mexico, USA).	Anecdotal description of the programme's pilot phase (4 weeks). Additional student mentors mentioned (N=?).	Male youth (16yrs) inmate participants (N=4?) Less restrictive selection process for programme.	Anecdotal report describing programme. Summary of initial observations made by practitioners. Letters written by participants for potential adopters of dogs used to measure success.	Perceived positive effects include: improved understanding of behaviour, emotional experience, approach to problem solving, improved attitudes to dogs / training, increased empathy and kindness, and self-reflection. Recognises limitations of what can be achieved in short time periods, while simultaneously recognising promising progress that is made.	Anecdotal description only; no clear methodology described and findings are hard to evaluate.

Section 6: Gaps identified in previous research, and discussion

"As in any developing field, there is a need for research studies that can support claims made by individuals in support of these programs.... It is difficult to increase general support and expand innovative ideas without evaluation of measurable data."
                                                                (p60, Deaton, 2005).

The first recorded prison based dog training programme was established in 1981; despite the frequently reported and wide ranging benefits, there have been no systematic and well-controlled studies that effectively examine such a programme over a reasonable time scale. Although PAPs are increasing in popularity, systematic evaluations are very limited; research examining AAI/AAT frequently suffers from similar limitations (Nimer and Lundahl, 2009; Kazdin, 2011; Maujean et al, 2015). Terminology and procedures are not standardised; researchers have varying objectives and frequently rely on anecdotal reports and qualitative methods (Lai, 1998; Furst, 2006; Fournier, 2007). A review by the Correctional Services of Canada, while critical of the lack of systematic study, suggests "Many institutions do not document the results of their programme because *its success is visibly noticeable to all involved* and anecdotal information often takes the place of empirical data" (p20, Lai, 1998). Despite widespread international implementation (Bustad, 1987; Lai, 1998), detailed information regarding the number and nature of PAPs can only be sourced from reviews in the USA (Strimple, 2003; Furst, 2006). These reviews (now considerably out dated) highlight a substantial increase in programme prevalence between 2003 and 2006; there has been no further published information on whether this growth was sustained. Well-designed evaluative studies are rare, and consequently the common outcomes for prisoners and the programme types of greatest efficacy are yet to be identified.

The disparity between research evidence and the continued programme introduction (without protocols for evaluation) caused the most recent review to question whether this represents a case of the tail wagging the dog (Mulcahy and McLaughlin, 2013). To review the evidence base, Mulcahy and McLaughlin (2013) conducted a comprehensive literature review; all articles (up to 2012) were pre-screened by title and abstract according to the following criteria: (a) evaluation of an animal programme, or programmes, delivered in a correctional setting; (b) use of

quantitative or qualitative techniques to investigate programme outcomes for prisoners or staff; (c) published in any peer reviewed journal; and (d) published in English. The searches identified nine studies that were relevant and met criteria for inclusion in the final analysis. From the reference lists of these papers, and other PAP-specific literature, an additional two PAP studies were identified (Lee, 1983, 1987; Merriam, 2001) which did not meet the original inclusion criteria (c) but were included in the final analysis due to extensive referencing by others. Their review concludes that there are extensive limitations to current research examining the efficacy of PAPs. Most studies were conducted on small sample sizes, and in most cases, pertinent methodological details were insufficiently described. In many studies, demographic information for the participant groups was limited to age and gender. Most studies did not provide any offence or sentencing information, and several did not describe the correctional facility or prisoner population. Less commonly, the programme under evaluation was also poorly described. Key procedural and analytic processes, such as interview procedures, survey items, and methods of qualitative analysis, were also frequently omitted, making it difficult to compare or replicate results.

Addressing the gaps identified in previous research

Through this thesis, the following gaps are addressed:

Gap 1: Comprehensive description of processes of development and evaluation of the programme. Although PAPs have been introduced widely internationally, very little information is available on how to develop such programmes effectively, despite the complex nature of these interventions. A core aim of this thesis is to describe the process of intervention development (Chapter 2) and the development of the evaluation (Chapter 3) in relation to the specific target group and provide recommendations to guide the development and evaluation of PAPs in the future (Chapter 6).

Gap 2: The Scottish context. Despite the history of PAPS in the UK, and their increase worldwide this is the first prison based dog training programme in the UK. The comparative approach will provide a deeper understanding of the generalisability of findings across contexts. Our understanding of prison based dog training programmes has been gained from other countries, who have different criminal

justice systems, and due to the limited descriptions provided of the prison populations from which their participants are drawn, it is difficult to estimate how these studies relate to the UK or Scottish context. Furthermore, our understanding of effective interventions for male young offenders has also been drawn from outside of the Scottish context, as shall be highlighted in Chapter 2 (Section 3). In this thesis, the sample of participants is described in detail (see Chapter 4, Section 3), and comparisons are made between the results of this evaluation and those described in previous research to draw out similarities and differences in relation to context.

Gap 3: Comprehensive evaluation, systematic and controlled. Despite the frequently reported and wide ranging benefits of prison based dog training programmes, there have been no systematic and well-controlled studies that effectively examine such a programme over a reasonable time scale (i.e. years). In this thesis, I address this significant gap in previous research and provide the most comprehensive evaluation of a prison based dog training programme to date. Using both quantitative and qualitative methods and employing a mixed research design with a wide range of measures allows for comprehensive evaluation of short, medium and long term outcomes, providing far more detail and evidence than previous research in this field.

Gap 4: The wider context. Previous research has failed to fully provide information on the wider context, which is crucial for interpretation, given the breadth of likely contributing factors to outcomes and programme success. By clearly communicating each step of the 5 Step approach (1. Identify the problem; 2. Review the evidence; 3. Develop a logic model; 4. Identify indicators and monitor the logic model; 5. Evaluate the logic model) to development and evaluation, this thesis will examine the likely contribution of Paws for Progress toward long term outcomes of participants whilst taking the wider context into account.

Gap 5: Assessing the impact for all programme participants, including the dogs. There has yet to be an evaluation of a PAP which examines the impact on both participating humans and animals. Although not included within the thesis, the outcomes for participating dogs in Paws for Progress were of equal importance in evaluating the programme's efficacy. The comprehensive analyses of dog behaviour and welfare pre and post programme participation showed improvements in both, with effects enduring back in the shelter kennel environment. Almost all participating dogs were

successfully rehomed. It is essential that the welfare/rehoming needs of the dogs are considered alongside those of the students for the programme to be successful and the desired outcomes achieved.

Discussion

The critical need for well-designed studies to support the claims made regarding dog training PAPs has been highlighted throughout this Chapter. To effectively evaluate AAI, the aim of the intervention must be clearly connected to the outcomes measured; the overarching question is why the addition of animals would be expected to make a difference (Kazdin, 2011). As well as clearly reporting methods, outcomes and limitations, it is critical that the details of the intervention and the processes involved are reported; allowing others to deliver the interventions effectively, subsequently replicate the effects of the intervention and inform best practice in this field. Multiple outcome measures and multiple methods of assessment are advisable, to strengthen the conclusion that the variable of interest was altered. Although the focus and methodology vary between studies, qualitative research investigating participants' experiences in PAPs has yielded very similar findings and consistently recognised the potential of these factors to impact upon participants' future experiences and desistance from crime. Theories regarding the potential long term effects need to be substantiated, evaluating programme efficacy by quantifying the outcomes identified by qualitative research and clearly relating this to long term measures.

When systematic quantitative methods have been used, the range of measures has been limited, and conclusions are also constrained by a brief research period (Fournier et al, 2007). Sufficient hypothesis have been generated by exploratory studies to make quantitative research methods feasible (Turner, 2007). However, this is recognised as being particularly difficult in the applied context of the institutional prison environment. Mixed methods – triangulating and integrating quantitative and qualitative methods in parallel (Ostlund et al, 2011) – offers the best potential. Combining the respective strengths of each approach allows us to examine a greater range of research questions, from 'what?' to 'how much?' to 'why?' and 'how?' (Kuper et al, 2008). By using mixed designs and employing pre/post-test controlled measures, improvements in areas previously identified by qualitative methods can be quantified, and the effects simultaneously described and explained by those directly

affected by their participation; the offenders involved in the dog training programmes.

The following chapters describe how the recommendations provided by this critical review feed into the development of Paws for Progress, the first prison based dog training programme in the UK, and how the gaps identified in previous research are addressed in the evaluation conducted. In Chapter 2, I consider the context and framework used to develop and evaluate the programme which describes the 5 Step approach (Scottish Justice Analytical Services, 2014; Bisset, 2015) and the Logic Model developed for this purpose. In Chapter 3, the pilot study and development of methodologies within the constraints of this applied context are presented. This is followed by the quantitative results (Chapter 4), the qualitative results (Chapter 5), and the conclusion of this thesis in Chapter 6.

Chapter 2 - Development of the first prison-based dog training programme in the UK: Paws for Progress

Summary

Paws for Progress, the first prison-based rescue dog training programme in the UK, was introduced at HM YOI Polmont in 2011. In this programme, male young offenders train rescue dogs to prepare them for rehoming, using positive reinforcement to achieve their goals. The programme was designed to be mutually beneficial; it aims to improve the behaviour and welfare of participating dogs, and to improve behaviour, increase engagement in education, develop employability skills, and enhance well-being of the young men.

Collecting and evaluating data to review the impact of Human Animal Interaction (HAI) services and Animal Assisted Interventions (AAI) ensures that service users' needs are met, whilst enabling further developments to service provision. The methods of data collection should be considered at the early stages of planning, to ensure there is a clear relationship between the needs of participants, the aims of the programme and the outcomes. For this reason the 5 Step approach to evaluation (Bisset, 2015) begins at the planning stage. By triangulating methods and using multiple measures, a broader picture can be developed of the impact of the intervention across a wide range of areas. By identifying needs of target groups and taking a user led approach to service development, these initiatives have greater potential to improve participant outcomes and benefit the community more widely.

Section 1: The 5 Step Approach: Scottish Justice Analytical Services

To expand understanding of the potential benefits of HAI, it is critical that the development and evaluation of HAI programmes are carefully documented, and the rationale for implementing the programme is evidence-based. The 5 Step approach to service development and evaluation, advocated by the Scottish Justice Analytical Services (2014), provides a framework that is outcome focussed from outset.

The 5 Step Approach – A Summary

1. Identify the problem

2. Review the evidence

3. Develop a logic model of how your service should work

4. Identify indicators and monitor your model

5. Evaluate the logic model

Steps 1-3 will be the subject of this chapter, while Step 4 is the subject of Chapter 3 (Development Methodologies) and Step 5 is considered through Chapters 4 and 5 (Quantitative and Qualitative Results).

Section 2: Step 1: Identifying the problem

Identifying the needs of Scottish male young offenders (Context: 2010, during the project development)

By implementing a HAI intervention, this project addresses several related needs arising from current evaluations of young offender provision in Scotland: improving offender engagement with educational programmes; developing social and problem-solving skills; achieving targets and overcoming low self-confidence. All of these are considered key to the overall personal development of offenders, and offer improvement of their social and mental health and subsequent likelihood of reoffending.

As 70% of the male young offenders in custody in Scotland have difficulties with literacy and numeracy, considerable efforts are taken to improve these with a range of educational programmes. However, it is often difficult to engage these young people in education; in an average month only around 30-35% of prisoners in Scotland participate in educational programmes (Scottish Parliament, 2009). Recent reports by Her Majesty's Inspectorate of Prisons (HMIP) commended HM YOI Polmont for the 'high level of motivation among staff committed to helping the young men in their care' (HMIP Polmont, 2007). However, concerns regarding low levels of engagement of young offenders in programmes and education (Polmont staff, personal communication, 2010) are also described in the HM YOI Polmont Visiting Committee Annual Report (2009; p11):

> *"Clearly a very high proportion of the YOs within the Institution could benefit considerably from attending classes in the Learning Centre. But many YOs do not have the necessary interest, often due to past experience, or the enthusiasm, to get up and go despite the encouragement from hall staff."*

Rates of reoffending are very high in this population; 88% of the young offenders currently in custody are recidivists (HMIP, 2009). The risk of reoffending increases as the number of previous convictions rises, and is higher in those with the greatest need for cognitive skills interventions and lower employability skills (Hancock and Raeside, 2009). Psychological distress and suicide risk are higher in prison populations, particularly among young offenders from socially disadvantaged

backgrounds; this can be exacerbated by the isolating prison environment (Fazel et al, 2005; Jenkins et al, 2005; Drapalski et al, 2009).

The negative impact of social disadvantages upon psychological distress may be intensified by deficits in social problem-solving skills (Biggam and Power, 1999). The latter are exceedingly low in prison populations, and may both contribute to committing the original offence and predispose offenders to maladaptive coping within the prison environment (Biggam and Power, 1999; Hancock and Raeside, 2009). In young male offenders in custody, social problem-solving deficits are greater in those at high suicidal risk, which suggests individuals with the most impoverished interpersonal skills may be the most vulnerable to the stresses of the prison environment (Biggam and Power, 1999, 2002). The social adversities experienced by young male offenders prior to conviction are frequently related to difficult family backgrounds and a lack of social support (Chambers et al, 2000; Jenkins et al, 2005; McKinlay, 2009). In a study of incarcerated Scottish male young offenders, Chambers et al (2000) found strong associations between experiences of poor parental care and both low self-esteem and psychological distress. Self-esteem appears to mediate the effect of low social support upon anxiety and depression. The Prison Survey was introduced to the Scottish Prison Service (SPS) in 1990 as a mechanism to inform and support SPS planning processes; the focus of the Survey has expanded over time. The Survey provides a Bulletin, which deals specifically with young offenders. In the 2009 Prison Survey, 640 young offenders participated, who provided positive responses regarding prison standards and care. On a less positive note, approximately half the young offenders reported 'Never' or 'Rarely' to the following items: 1. *'feeling interested in other people'* (53%), 2. *'feeling useful'* (47%), 3. *'feeling close to other people'* (45%), 4. *'feeling loved'* (45%).

If the ultimate aim is to change people's behaviour, it is essential to be clear from the start about the problem; Figure 2.1 summarises the key questions and answers relevant to the development of Paws for Progress in terms of identifying the problem and articulating the ultimate aim.

Figure 2.1: Step 1: Summarising the problems identified and aims of Paws for
Progress

WHAT is the problem?

Male young offenders frequently experience low levels of
education, a lack of employability prospects, a lack of social
support and poor psychological wellbeing.

WHY is this a problem?

A lack of employment opportunities, poor social support and a lack of
confidence in their abilities to contribute positively to society decreases
the likelihood of these young people desisting from crime, which in turn
impacts negatively on their own wellbeing, their families, communities
and is costly to society as a whole.

What is your AIM?

To improve behaviour, increase engagement in education, develop
employability skills, and enhance well-being.

What is your ULTIMATE AIM?

Young people realise their potential to contribute positively to their
communities. Young people have improved social support, gain
employment and / or access further education and training, form more
pro-social identities and desist from crime.

Section 3: Step 2: Review the evidence

Reviewing evidence in relation to the programme's aims is an integral part of the planning process, increasing the likelihood of achieving the desired outcomes. Reviewing evidence is also crucial for evaluation, allowing others to assess the quality of evidence behind a programme's theory of change, and to consider the rationale that the programme's activities should lead to the outcomes expected. The following table summarises the evidence on Reducing Crime, from the full evidence review 'What Works to Reduce Crime' (Scottish Government Justice Analytical Services, 2014), to provide an overview.

Table 2.1: Summary of evidence on what works in reducing crime (Adapted from Scottish Government Justice Analytical Services, 2014)

Tackle the root causes of crime	• Multiple risk factors linked to parenting; abuse, neglect, exposure to domestic violence and parental substance misuse. • Issues related to low self-control and poor social skills. • Quality of care of children and young people and identification and protection from abuse and neglect are key.
Address key social factors	• Staying at school and diversion activities (e.g. sport) are protective factors. • Holistic employment programmes that also provide social and educational support can be effective. • Restrict access to alcohol and tackle drug and alcohol abuse. • Minimise the impact of criminal justice sanctions on family bonds.
What factors are related to reoffending?	• Criminal history (previous convictions), age, gender, disposal type, index crime, age and sentence length. This information can be used to target resources towards medium-high risk offenders. • To reduce reoffending, an intervention needs to target dynamic criminogenic needs such as: Criminal attitudes and values; Anti-social lifestyle; Criminal peers; Poor problem-solving/impulsive behaviour; Lack of employment, volunteering or leisure activities; Homelessness; Substance misuse; Low motivation, lack of hope and low self-efficacy. • Offenders usually have **multiple needs** and thus interventions tackling a range of problems are more effective. The extent that needs have been addressed can be defined and measured as intermediate outcomes (short and medium term).
Effective practice – Interventions	• Respectful, skilled, participatory and flexible contact with supervisors. • Prison-based interventions' efficacy is enhanced when post release support is provided. • Holistic interventions targeting multiple needs and involving families and the community are more likely to be effective. • Cognitive Behaviour Therapy (CBT) programmes can reduce reoffending but quality assurance is key to success. • Stable and quality employment is a protective factor, especially if accompanied with other support.

	- One-size does not fit all - responsive programmes have better outcomes. - Programme integrity and integration is crucial; emphasis is on quality assurance. - Focusing on a single outcome (e.g. employment) increases likelihood of failure creating feelings of despondency. - Well-sequenced interventions that see progress as a series of small steps.
Effective practice – Practitioner skills	- Practitioner skills important for effective interventions: excellent interpersonal skills, open, caring, warm, enthusiastic and empathetic. - Problem-solving advice and practical help. Persistence is seen as genuine interest and concern. Use advocacy skills to resolve practical problems and remove obstacles. Modelling/praising non-criminal behaviour and disapproving of criminal behaviour. - Time to provide effective support. - Involve offenders to develop release and treatment plans - develop a sense of self-determination. - Formal training, supervision and support for practitioners are essential. - Practitioners should be involved in designing the programme.
Effective practice – Throughcare	Although evidence on outcomes is limited, an international review found effective throughcare services were perceived to be based on the following features: - Appropriate targeting of interventions. - Consistent key workers enable trusting and flexible relationships to develop. Pre-release plans are crucial and prisoners should be involved in devising these plans. - Services available and accessible at the point when a service user is ready to make changes. Supervision level relative to risk of reoffending. - Multi-agency working and a holistic approach is important. Agencies should have distinct functions and remits, shared objectives, adequate resources and maintain a strong working relationship. - Early contact is crucial, ideally at the point of sentencing. - Day release is important for motivation and avoiding disruption on release. - Access to welfare provision and housing is crucial but can be extremely difficult. - Services should be needs led rather than service led.

Desistance, the process by which those engaged in a sustained pattern of offending give up crime, is connected both to the external, social aspects of a person's life (such as the supportiveness of those around them) and to internal/psychological factors (such as what they believe in and want from life). 'Transforming Rehabilitation: Summary of evidence on reducing reoffending' (Ministry of Justice Analytical Series 2013) suggests desistance includes the following factors, which show convergence with areas outlined in Table 2.1 and were relevant to the intervention development:

Employment: Steady employment, particularly if it offers a sense of achievement, satisfaction or mastery.

Family and relationships: Forming strong and supportive bonds with others.

Hope and Motivation: A clearly stated desire to stop offending along with both motivation to change and the confidence that change is possible.

Having something to give to others: Showing concern and empathy for others. Contributing to society, community or family especially if contributions are formally recognised.

Having a place within a social group: Social networks such as extended family, mutual aid groups, activity clubs and cultural or religious groups.

Not having a criminal identity: An ability to identify as a basically good person who made a mistake.

Being believed in: Interactions with people who believe the offender can change, is a good person and has something to offer society.

The Scottish Government, Justice Analytical Services (2011) 'What Works To Reduce Reoffending: Evidence Review Summary' includes the following recommendations:

- Respectful, participatory and flexible contact with supervisors can trigger positive change

- Holistic interventions that target offenders' multiple needs and involve work with families and the wider community (e.g. employers) are more likely to be effective

- Providing support after release enhances the efficacy of prison-based interventions

- Stable and quality employment can be a protective factor, especially if accompanied with other forms of support

 As suggested in Table 2.1, there are a number of factors (such as gender, age) which influence offending behaviour; therefore the particular needs of male young offenders were a key consideration.

Male young offenders: Risk factors, effective interventions and desistance

Risk factors

Young offenders in custody represent a high-risk, vulnerable population with disproportionately high rates of unmet physical, developmental, social, and mental health needs, and higher mortality (Barnert et al, 2015). Juvenile offending predicts a higher likelihood of chronic adult offending, as well as adverse adult outcomes such as poor health, substance use, and increased mortality; furthermore, adolescents from socially disadvantaged neighbourhoods are at higher risk for incarceration (Barnert et al, 2015). Spending time in custody places youths at greater risk for repeat offending throughout adolescence and adulthood, and within 3 years of release, approximately 75% of adolescents are rearrested (Barnert et al, 2015). The concept of the 'age-crime curve' relates to the sharp incline in offending behaviour during early adolescence, peaking during the mid-late teenage years and then declining, steeply at first (to the mid-twenties) and then more steadily; however, although crime is mostly committed by the young, and tends to decline with age, considerable variation can be found in the parameters of the 'age-crime curve' (Fraser et al, 2010).

Risk factors are prior factors that increase the risk of occurrence of the onset, frequency, persistence or duration of offending. For example, quantitative studies frequently identify low school achievement, poor mental health, substance use, parental incarceration, poor parental supervision, delinquent peer groups, and residing in high-crime neighbourhoods as risk factors for juvenile offending (Barnert et al, 2015). In contrast, protective factors are linked to positive outcomes, and are seen to protect young people from difficulties, even when they are growing up in adverse circumstances and are heavily exposed to risk. The rather more modest literature on protective factors for juvenile incarceration highlights the importance of supportive family relationships, pro-social peers, academic achievement, reading ability, and psychological factors such as self-esteem and empathy (Barnert et al, 2015). In the UK, the Cambridge Study in Delinquent Development investigated the onset of offending by young people and tried to assess how far criminality can be predicted on the basis of childhood characteristics (Farrington, 2003). From 1961, this longitudinal study followed a sample of 411 boys from age eight onwards to

examine which of them became involved in offending and why some continued offending. Of the small sample of 'chronic' offenders (approx. 6%, or n=23) who continued to offend into adulthood, most shared common childhood characteristics: tending to come from larger, poorer families; rated as troublesome, restless, and impulsive by teachers at primary school; more likely to have criminal parents and/or older siblings, and; subject to erratic parental supervision (Farrington, 2003, 2007). Based on this, the Cambridge Study identifies predictors of future criminality, variously identified as individual, family and environmental factors. Other international longitudinal studies generated apparently generally applicable results which identify similar factors in young people's lives that appear to be associated with an increased risk of problems at school, drug and alcohol misuse and the likelihood of youthful offending (Fraser et al, 2010). The treatment approach currently dominant in criminal justice is the risk/need model, where dynamic risk factors associated with recidivism are systematically targeted in treatment and the intensity (i.e. dosage) of treatment delivered is related to each offender's assessed level of risk (Ward and Brown, 2004).

Fraser et al (2010) provide the following summary of the risk factors associated with young people becoming involved in violent offending, identified from life-course and longitudinal research.

Individual risk factors: Low intelligence. Low school attainment (beginning at primary school). Poor ability to control behaviour (impulsiveness; hyperactivity; acting without thinking). Poor techniques of thinking, problem-solving. Low empathy. Low self-esteem.

Family: Poor parental supervision and discipline. Family conflict. Family history of problem behaviour. Parental involvement in / attitudes condoning problem behaviour.

School: Low achievement (beginning in primary school. Disruptive and aggressive behaviour, including bullying. Lack of commitment, including truancy/poor attendance. Lack of discipline and disorganisation in school.

Community: Community disorganisation and physical deterioration/neglect. Availability of drugs. Disadvantaged neighbourhood. High turnover and lack of neighbourhood/community attachment.

Individuals, friends and peers: Alienation and lack of social commitment. Attitudes that condone problem behaviour. Early involvement in problem behaviour. Friends involved in problem behaviour.

Fraser et al (2010) emphasise the importance of recognising that the risk factors related to whether an individual becomes involved in offending behaviour are not the same for every young person, and that there may be exceptions to the rule. Some offenders may come from relatively stable family backgrounds, for example, but have particular issues in relation to antisocial peers or problems at school. Also, whilst many risk factors are relatively well-established, far less established are the causal mechanisms linking such factors with offending. A major problem of risk-based prevention is to establish which risk factors are causes and which are merely correlations (Farrington 2003; Farrington 2007) and it can also be argued that correlations between risk factors provide little information about why young people behave as they do. A second major problem is that risk factors tend to be inter-related. It appears that risk factors work cumulatively, in that the greater the number of risk factors to which an individual is exposed, the greater the likelihood of future convictions for violence. Many concerns have been raised about the risk-focused prevention paradigm, pointing to the collapsing of the distinction between causes and correlates and the risks that risk-based targeting may have for stigmatising, criminalising and marginalising young people (Fraser et al, 2010).

In America, the children at risk of falling into the school-to-prison pipeline include not only those with ADHD, a learning disability, and anxiety disorders, but also those who have experienced repeated trauma or abuse, depression, those on the autism spectrum, and those who are homeless (Greene, 2014). Behaviourally challenging children and young people are often poorly understood and are still being treated in ways that are ineffective and counterproductive; creating too many alienated, hopeless, sometimes aggressive, and sometimes violent young people. In two correctional facilities, the Collaborative Problem Solving approach was implemented; staff - inmate relationships changed, violent outbursts reduced and there were fewer

disciplinary reports. Incidents that resulted in injury, confinement, or restraint were reduced (Greene, 2014).

When exploring the perspectives of American young offenders in a qualitative study, incarcerated adolescents expressed the belief that youth in their communities live in environments that are chaotic, unsafe, and unstructured (Barnert et al, 2015). Juvenile detention was seen to provide respite from the chaos and dangers of daily life, but serving custodial sentences also perpetuates a cycle of re-arrest and incarceration that follows adolescents into adulthood. Youths discussed how they struggled to fulfil their innate emotional needs, and lacked positive role models who instil a positive future orientation. When these needs are not met, going to jail becomes the more likely pathway (Barnert et al, 2015). Participants demonstrated insight into the cycle of high-risk behaviours and criminality, and they desired help in breaking this cycle, seeking support from adults to help them accomplish this. Listening to youths and responding to their needs may therefore be an important starting point for successful interventions (Barnert et al, 2015). Although it appears that a "school-to-prison pipeline" exists, the perspectives of the participants indicated that although schools can catalyse the pathway to prison, they can also have an important protective influence. Participants expressed belief in the value of interacting with adults who have themselves broken the cycle of incarceration present in many socially disadvantaged neighbourhoods. Given youths' perceptions of absent parents and teachers who give up on them, they seem to be seeking inspiration and guidance from other adults who can demonstrate how people make it out of their neighbourhoods. This is consistent with previous studies that demonstrated the effectiveness of mentoring programmes in decreasing recidivism, and it suggests an important area for intervention (Barnert et al, 2015).

The Scottish Context

While there is general agreement that family factors can play an important role in the development of criminal behaviour in childhood and later life, there is limited research exploring family factors and offending behaviour within Scotland, although available data on persistent young offenders tends to support this view (Fraser et al, 2010). This research points in particular to the role of domestic violence and parental drug and/or alcohol abuse. Most convicted violent young offenders in Scotland grow

up in poor neighbourhoods characterised by territorial violence and the defence of respect and reputation (Fraser et al, 2010). Research with young people in custody highlights the significant role of substance misuse, especially excessive drinking, in the backgrounds of convicted young offenders in Scotland. Most young offenders report being under the influence of alcohol when committing their last violent offence (McKinlay et al, 2009; Fraser et al, 2010).

The Edinburgh Study of Youth Transitions and Crime (ESYTC) is a longitudinal programme of research on pathways into and out of offending for a single cohort of around 4,300 young people who started secondary school in the City of Edinburgh in 1998 (Fraser et al, 2010). One of the aims was to explore the factors leading to criminal offending and desistance from it, from the early teenage years onwards. Children from all school sectors were included and six annual sweeps of data collection were conducted while the cohort was aged (on average) 12 to 17. Self-completion questionnaires were administered in which young people were asked a range of questions about their involvement in forms of delinquent or offending behaviour, including questions on involvement in assault, robbery and carrying a weapon. The ESYTC findings show a particularly strong relationship between involvement in violent offending at age 15 and a range of vulnerabilities, including self-harm (Fraser et al, 2010). Importantly, those involved in violent offending were the most vulnerable and victimised young people in the cohort. Violent offenders were compared with other cohort members across a range of aspects of vulnerability. This analysis found violent young offenders were significantly more likely than nonviolent youths to be: victims of crime and adult harassment; engaged in self-harming and para-suicidal behaviour; exhibiting a range of problematic health risk behaviours including drug use, regular alcohol consumption, disordered patterns of eating, symptoms of depression and early experience of sexual intercourse; having more problematic family backgrounds; and, for girls in particular, coming from a socially deprived background.

The ESYTC demonstrates that individual vulnerabilities are strongly predictive of involvement in violence at age 15, even when controlling for early involvement in violence (by age 12) and family, school, leisure and peer-related factors. Violent behaviour at age 15 was significantly predicted by being a victim of crime at age 15, engaging in self-harming behaviour and risk-taking, even when controlling for a

range of other potential explanatory factors. Violence among boys was also strongly related to wider elements of vulnerability. Boys who had been harassed by adults were more likely to be violent and there was also a complex interaction between early experience of crime victimization (by age 12) and later experience of family crises among boys. This interaction suggests that for boys, violence at age 15 is predicted by elements of sustained adversity over time (Fraser et al, 2010). These findings show strong and consistent links between deeds and needs and the ways in which violence itself can be 'symptomatic' of a broad spectrum of vulnerability among both boys and girls. Many of the adversities faced by violent young offenders stem from close interactions with peers, family and other adults in the young person's lives and the mechanisms which they use to cope with the negative consequences of such interactions (such as self-harming behaviours) (Fraser et al, 2010).

The Scottish studies which address background and demographic characteristics confirm that most young people convicted of violent offending grow up in neighbourhoods characterised by socio-economic deprivation. This research reveals the complex range of issues which underpin violent behaviour – with a range of background and foreground factors interweaved and a particularly strong association between involvement in violent offending and a range of vulnerabilities (Fraser et al, 2010). However, information on effective interventions for young offenders is not available for Scotland. Apart from the ESYTC, the available evidence on interventions relating to youth offending comes from the international literature, in particular from the United States, England, and elsewhere in Europe (Fraser et al, 2010).

Effective Interventions

There has been a considerable shift in attitudes toward offender rehabilitation in recent decades, from a conviction that nothing works to the confident statement that certain kinds of treatment strategies reliably reduce reoffending rates (Ward and Brown 2004). Lipsey and Wilson's review (1998) included over 200 experimental or quasi-experimental studies of interventions with young people (mainly males) aged between 10 and 21 years. Most had records of prior offences, usually property crimes and aggressive behaviour. Overall, offenders who received 'human service' interventions (involving support professionals focusing on the development of human skills and pro-social development) showed an average twelve per cent

decrease in re-offending compared to the control groups, suggesting that these types of treatment generally do have some effect, if modestly (van der Merwe and Dawes, 2012). As meta-analytic studies do not take variability in effectiveness across programmes into account, this result masks important distinctions between effective and ineffective interventions and should be considered conservative.

Three intervention types showed the strongest and most consistent evidence of reducing re-offending. These were interpersonal skills training; individual structured counselling; and cognitive behavioural programmes. The review found that these interventions reduced re-offending by about forty per cent. Close behind the top three intervention approaches was a second tier of promising intervention types; these included multi-modal services (combinations of services or interventions that involved several different approaches) and restitution programmes (Lipsey and Wilson 1998). The review included programmes for those in young offenders' institutions or residential facilities; the general characteristics of institutional intervention (the way in which a programme was organised, staffed, and administered) showed the strongest relationship to the effect of the intervention in terms of impact on re-offending. Of particular note is the influence of longevity of the programme and who it was administered by, irrespective of the individual characteristics of the young people. Interpersonal skills programmes (involving training in social skills, aggression replacement and anger control and cognitive restructuring) provided very promising outcomes in institutional and residential settings as did family group living homes (Lipsey and Wilson, 1998). In a more recent meta-analyses conducted on the effectiveness of behavioural and cognitive-behavioural treatment in reducing recidivism for offenders (adult and young offenders, Pearson et al, 2002), it was similarly shown that this treatment is associated with considerably reduced recidivism rates. However, this effect is mainly due to cognitive-behavioural interventions rather than to standard behaviour modification approaches (contingency contracting, token economies etc.). The specific types of programmes shown to be effective include cognitive-behavioural programmes, social skills development programmes and cognitive skills programmes.

Theoretically grounded programmes that rely on research evidence have been found, on average, to be five times more effective in reducing antisocial behaviour than those without a theoretical basis; this emphasises the need for interventions targeting

young people to be evidence-informed, as this is often not the case (Lipsey, 2009; van der Merwe and Dawes, 2012). Interventions should be informed by knowledge of the way in which violent conduct develops through childhood and adolescence and take consideration of the multiple contexts (family, school, peer group, wider society) that influence the developing person at different points in the life cycle (van der Merwe and Dawes, 2012). In general, the research literature indicates that patterns in antisocial and offending behaviour tend to be age-graded which suggests that different forms of intervention will be required at different stages of the life-course. For young offenders, the most successful interventions make use of family, community and educational opportunities in innovative ways to support individuals (e.g. peer mentoring), working with the needs and motivation of offenders to enhance change. To be effective, interventions need to be targeted to specific offenders and their needs, and this means recognition of key difference on the basis of gender as well as age (Fraser et al, 2010).

Meta-analyses of outcome studies have consistently indicated that multimodal, structured, cognitive-behavioural interventions, particularly those that include interpersonal and social skills training, are effective in reducing violent and other antisocial behaviour by up to 40% (Lipsey and Wilson, 1998; Lipsey, 2009; Fraser et al, 2010; van der Merwe and Dawes, 2012). Other effective young offender programme types include: provision of employment (38% reduction in target/antisocial behaviours); and skills-oriented approaches that target the skill deficits that caused or contributed to offending behaviour (20% reduction in target behaviours). In contrast, deterrence, involving interventions that aim to threaten or scare the young person into abandoning his / her antisocial behaviour are associated with a 25% increase in offending, while vocational counselling alone is associated with an 18% increase (Lipsey and Wilson, 1998). Wilderness/ adventure therapy programmes have repeatedly been found to have weak or negative outcomes when they are not combined with other intervention components known to be effective (Lipsey and Wilson, 1998).

Interventions devised to address several problems in combination have been termed multi-modal (Lipsey, 1998). In a review of effective interventions for reducing aggression and violence (adults and young offenders), those employing emotional self-management, interpersonal skills, social problem-solving and allied training

approaches showed mainly positive effects with a reasonably high degree of reliability (McGuire, 2008). However, McGuire (2008) highlights the complexity of the assessment of multiple risks / needs of the individual, alongside disentangling the most likely 'active ingredients' of specific interventions and of developing appropriate methods for maximising intervention impact. Research projects in which such components are dismantled and evaluated separately remain relatively exceptional, leaving many issues concerning effectiveness unresolved. Furthermore, in outcome research there are often competing demands between practical need and service delivery on the one hand, and rigorous evaluation on the other. Allocation to different levels or types of services in social welfare and criminal justice is customarily in the hands of the prison authorities. Typically, evaluation projects are unlikely to attain the standards of good experimental designs, most importantly in ensuring the equivalence of experimental and control samples with respect to key variables that may confound measured outcomes. An additional difficulty arises from the recurrently high levels of attrition typically found among offender samples (McGuire, 2008). These factors often reduce the methodological quality of evaluations with important consequences for hypothesis testing regarding treatment effects. However, it is important not to abandon practical trials that will attest to the usefulness of methods in routine service delivery: quasi-experimental studies can yield valuable information that may be more easily transferred to practical 'real life' settings (McGuire, 2008).

When analysing a broader range of intervention factors to allow identification of both the general principles and the distinct intervention types associated with the greatest reductions in recidivism, only three factors emerged as major correlates of programme effectiveness: a "therapeutic" intervention philosophy, serving high risk offenders, and quality of implementation. With other variables statistically controlled, relatively few differences were found in the effectiveness of different types of therapeutic intervention (Lipsey, 2009). The three categories of factors most strongly associated with intervention effects are the intervention approach and modality (type of treatment), the quantity and quality of treatment provided, and the characteristics of the juveniles receiving that treatment. Such meta-analytic studies have found relatively large positive effects associated with cognitive-behavioural and skill building programmes but have also sometimes found comparable effects from

different approaches (e.g., general counselling) (Lipsey, 1998, 2009). Interestingly, in these analyses, the quality with which the intervention is implemented has been as strongly related to recidivism effects as the type of programme, so much so that a well-implemented intervention of an inherently less efficacious type can outperform a more efficacious one that is poorly implemented. Quality of implementation, often not well documented in the respective research reports, is most evident in the form of a proxy variable; involvement of the researcher/developer in the delivery of the programme. That factor allows for other interpretations, but mainly differentiates programmes mounted for research and development purposes, presumed to be more carefully implemented and monitored, from those used in routine practice by juvenile criminal justice agencies (Lipsey, 2009).

It is encouraging that good programmes can be effective within institutional environments where there is more potential for adverse effects through, for instance, greater association with antisocial peers, or the stress and isolation experienced in the institutional environment (Lipsey, 2009). Interventions that embody "therapeutic" philosophies, such as counselling and skills training, are more effective than those based on strategies of control or coercion (deterrence and discipline); that difference was one of only three characteristics that clearly distinguished more effective from less effective interventions. The second of these was that interventions applied to juveniles with higher levels of delinquency risk were more effective, though that effect could be offset somewhat due to the aggressive/violent histories of this group. Third, interventions that were implemented with high quality were more effective (Lipsey, 2009). The interventions represented in the programme categories used in this analysis included very few model programmes or even named programmes of any generally recognised sort, but the findings indicate that the average programme of this rather variable generic sort can be quite effective if implemented well and targeted on high risk offenders. However, the extent to which those positive effects can be reached depends on high quality implementation directed toward high risk offenders. The main index of quality of implementation used in the analysis is that of a research or demonstration programme in which the researcher is involved in supervising and / or delivering the intervention. In such circumstances (46% of the studies in the meta-analysis), attaining high fidelity to the programme-as-intended is an objective of the research process; the efficacy of the

intervention can only be tested if what is actually implemented represents the intervention well. Particular care may therefore be taken, to ensure that the treatment providers are properly trained and supervised, that the service delivery is monitored, and that corrective actions are taken when quality declines. Practitioners using generic counselling, skill building, or multiservice programs to attain the magnitude of recidivism reductions shown in this meta-analysis will also have to match at least the average quality with which those programmes were implemented (Lipsey, 2009). Unfortunately, such quality may not typically be attained in everyday practice; in an earlier analysis with this same database (Lipsey, 1999), the mean recidivism effect size for routine practice programmes was found to be about half that of the research and demonstration programmes, even for the routine practice programmes that were selected for evaluation, a group itself likely to be above average (Lipsey, 2009).

To be most effective, interventions need to be situated within a supportive wider social context, they need to be focussed and targeted, they should be positive and engage those for whom the programmes are designed and they need to be tailored to the abilities, learning styles, personalities and social and cultural background of the participants (Fraser et al, 2010). Analyses from the ESYTC further highlights the importance of non-stigmatising approaches and the impact that negative labelling of young people within formal agencies of support can have in terms of reoffending (McAra and McVie 2007; Fraser et al, 2010). A more positive approach is illustrated by the Good Lives model, which takes a holistic approach to offender rehabilitation which focuses less on the deficits of offenders, moving away from looking at offenders as a set of criminogenic needs towards a holistic appraisal of the individual in context. The main theme underpinning the Good Lives model is that those who offend are seeking to achieve primary human goods in a similar manner to the rest of society; by recognising and harnessing this we can work more humanely and more effectively in partnership to reduce offending (Ward and Brown, 2004). According to this view, there are a number of important conceptual issues that are not adequately addressed by the risk/need model and approach. These issues include: the importance of adopting a positive approach to treatment; the relationship between risk management and good lives; causal preconditions of therapy; and the impact of therapists' attitudes toward offenders. Ward and Brown (2004) argue the

management of risk is a necessary but not sufficient condition for the rehabilitation of offenders, proposing that the best way to lower offending recidivism rates is to equip individuals with the tools to live more fulfilling lives rather than to simply develop increasingly sophisticated risk management measures and strategies. Those with histories of offending behaviour, like the rest of humanity, have needs to be loved, valued, to function competently, and to be part of a community. In line with this, there is a need for psychology to adopt a more constructive, strength-based approach to offender rehabilitation (Ward and Brown 2004; McNeill and Maruna, 2007). More specifically the risk/need model does not systematically address the issue of offender motivation and tends to lead to negative or avoidant treatment goals. The focus is on the reduction of maladaptive behaviours, the elimination of distorted beliefs, the removal of problematic desires, and the modification of anti-social emotions and attitudes. In other words, the goals are essentially negative in nature and concerned with eradicating factors rather than promoting pro-social and personally more satisfying goals. This perspective often results in mechanistic "one size fits all" approach to treatment and does not really deal with the critical role of contextual factors in the process of rehabilitation. In order to motivate offenders to pursue more socially acceptable goals, it is necessary that they view the alternative ways of living as personally meaningful and valuable (Ward and Brown, 2004).

While there are clearly promising approaches, evidence around 'what works' in a Scottish or UK context is limited and much of the evaluative research had been based on American populations, and evidence on issues such as required duration, intensity and sequencing of programmes of intervention is also limited (Fraser et al, 2010).

Desistance

The desistance literature broadly concurs that most young people 'grow out' of crime, although both social structure and context are important for successful transitions. Findings from the ESYTC show that young people's ability to desist was inhibited by living in neighbourhoods characterised by deprivation, social instability and high crime rates (Fraser et al, 2010). Essentially, desistance research suggests that people give up (or desist from) offending as a consequence of the development of personal maturity, changing social bonds associated with certain life transitions (such as significant personal relationships, employment, parenthood) and the individual

subjective changes in the person's sense of self and identity (Maruna 2001; McNeill 2006; McNeill and Maruna, 2007; Fraser et al, 2010). McNeill (2006) proposes that rehabilitative efforts should be built on understandings of the individual change processes experienced by ex-offenders, and on the broader research examining why and how people desist.

Qualitative studies have repeatedly confirmed that desisting from crime involves deep changes in the way that individuals see themselves and their relations to others (Maruna 2001; McNeill and Maruna, 2007). The process of desistance can stretch over a long period; it is very rarely a sudden change or an event, but typically an extended process. Personal and social relationships are crucial and also play a role in helping a 'reconstitution of the self'. In their accounts of achieving change, there is evidence that those who desist have to discover agency (the capacity to exercise choice and exert control over their lives), which seems to relate to the role of others in visualising an alternative identity and future for the offender. Research also confirms the centrality of effective and positive working relationships between the offender and professionals in supporting the process of change (Barry 2000; McNeill 2006; Fraser et al, 2010). The individual's access to resources and support from within their own familial and social networks is also crucial and there is evidence from a range of studies that engagement in conventional social roles is a critical factor leading towards desistance (Maruna 2001; McNeill and Maruna, 2007). Taken together, this would suggest the importance of the development of social capital, through relationships which facilitate participation and inclusion in society (Fraser et al, 2010). The concept of 'generativity' – which essentially involves giving back (a form of reparation that involves contributing to the wellbeing of others) – has recently been linked to successful desistance from offending (Barry 2006, 2007; McNeill and Maruna, 2007). Later in the change process, involvement in 'generative activities', confirms to the desister that this alternative positive identity has been realised. In summary, desistance typically requires both personal change and better integration within mainstream society; there need to be reasons to change, supports for change, and mechanisms for recognising change (Fraser et al, 2010).

Summary: Scottish Male Young Offenders: Multiple Needs

Scottish male young offenders frequently experience a diverse range of disadvantages, including: negative experiences of education, low levels of qualification; lack of work experience, low employability prospects; low self-esteem, lacking confidence in abilities; communication difficulties, poor emotional and social well-being and anger management; as well as difficulties coping with stress or the prison environment.

Paws for Progress: Programme Aims

The aims of the Paws for Progress programme are to improve behaviour, increase engagement in education, develop employability skills, and enhance well-being. Employability skills encompass social competencies including: effective communication; interpersonal problem solving skills; emotional management; ability to work independently and as part of a team; responsibility and decision making; problem solving; working towards targets and goals. The ultimate aim was that young people realise their potential to contribute positively to their communities, have improved social support, gain employment and / or access further education and training, form more pro-social identities and desist from crime.

Reviewing the evidence: A Prison based Dog Training Programme for Scottish Young Offenders

HAI in the form of a rescue dog training programme at HM YOI Polmont serves as an addition to programmes already in place; participation in programmes or education is voluntary and HAI may engage some young inmates who choose not to participate otherwise. Previous prison based dog training programmes have been specifically aimed towards violent male young offenders, and have been successful in improving emotional, social and practical outcomes (Harbolt and Ward, 2001; Merriam, 2001; Richardson- Taylor and Blanchette, 2001). However, systematic evidence based research in this emerging field is limited; when objective measures are used, control groups and pre/post-test conditions are lacking (e.g. Richardson-Taylor and Blanchette, 2001); and when these are included, conclusions are limited by a very short research period (e.g. two weeks, Fournier et al, 2007). While critical of the lack of systematic study, a review of Pet-Facilitated Therapy (PFT) by the Correctional

Services of Canada suggests "Many institutions do not document the results of their PFT programme because its success is visibly noticeable to all involved and anecdotal information often takes the place of empirical data" (p20, Lai, 1998).

The results of this research will provide much-needed empirical data, assessing the effectiveness of a dog training programme in improving young offenders' outcomes. Table 2.2 (adapted from Bisset, 2015) describes findings from international 'What works' evidence on reducing reoffending, from a review of quantitative randomised controlled trials of interventions, and highlights areas of relevance. Although few programmes will target all the needs of Scottish male young offenders, in Table 2.2 the risks of reoffending are related to the potential contribution of a prison based dog training programme such as Paws for Progress.

Table 2.2: Reducing Reoffending - 'What works' Evidence Matrix (adapted from Bisset, 2015) in which intermediate desired outcomes and approaches that work are related to the potential contribution of prison based dog training programme such as Paws for Progress (Risk factor: Homelessness omitted due lack of evidence based approaches or possible contribution).

Risks to reoffending	Intermediate desired outcomes	Approaches that work to address the risk	Promising approaches but more evidence needed	Potential contribution from Paws for Progress?
Limited social skills, problem solving skills and poor emotional management.	Skills in problem solving and perspective taking. Emotional management skills.	Structured CBT programmes such as cognitive skills training. Restorative Justice Conferencing.	No evidence identified in matrix. However, prison based dog training programmes have suggested participants report improvements in social skills, problem solving and emotional management.	Working together as a team and with staff with shared goal of helping dogs develops social skills. Problem solving applied to dog behaviour and subsequently to own personal development. Learning positive reinforcement training methods enhances emotional management.
Criminal attitudes.	Development of pro-social attitudes and a non-criminal identity.	Structured CBT programmes such as cognitive skills training and cognitive restructuring techniques.	Pro-social modelling, positive supervisor / mentor and staff interactions. Supervisors/ mentors challenge anti-social attitudes and promote pro-social attitudes.	Engage in activities with a charitable purpose and perceive the positive contribution through improved outcomes for dogs; informs development of a pro-social attitude and non-criminal identity.
Lack of positive recreation or leisure activities /antisocial lifestyle.	Participation in pro-social recreational activities, sense of reward from pro-social recreation and sustained involvement in pro-social lifestyle.	More evidence needed.	No evidence identified in matrix although noted supervisors/mentors could engage offenders in pro-social activities. Prison based dog training programmes report high engagement in such activities.	Participants engage enthusiastically with pro-social activities with dogs and gain a sense of reward from enhancing dog outcomes. Provides a positive focus in the prison environment which can continue in community.
Drug misuse and alcohol misuse.	Substance use reduced or stopped.	CBT, detox, opiate substitution. Psychosocial support to maintain abstinence, 12 step programmes, structured, therapeutic communities.	No evidence identified but supervisors / mentors could enhance engagement with services, provide psychosocial support, enhance wellbeing, address links between violence, substance abuse and emotional wellbeing.	No direct contribution but provision of social support and wellbeing enhanced through therapeutic benefits of positive HAI.

Risks to reoffending	Intermediate desired outcomes	Approaches that work to address the risk	Promising approaches but more evidence needed	Potential contribution from Paws for Progress?
Dysfunctional family relationships.	Conflict reduced, positive relationships, enhanced warmth and caring, reintegration into (non-criminal) social and family groups. Improving parenting behaviours and increasing acceptance into communities.	Therapeutic approaches for young adult offenders that involve the family.	Supervisors/ mentors could help young offenders engage with promising therapeutic approaches (namely relationship coaching / social interventions) and facilitate family visits to prison.	No direct contribution. Indirect effects could include interest / engagement with families in relation to participants' pro-social activities on the course, family events celebrating participants' achievements. Engagement in pro-social charitable activities increases acceptance into family networks and communities. Development of caring skills and empathy; more fulfilling relationships.
Un-employment.	Work skills, interpersonal relationship skills, reward and satisfaction at work. Long term employment and increased employment skills.	Employment-focussed programmes in which offenders can secure real jobs they enjoy.	Gaining work related qualifications. Gaining employability skills. Work related support /mentoring.	Provide educational qualifications that are most relevant to employment. Develop employability skills and provide positive work experience.
Low motivation and/or self-efficacy.	Offenders are highly motivated to engage with supervisors and interventions. Offenders are confident they can develop the skills to desist from offending.	Offenders build positive trusting relationships with skilled, empathetic and flexible supervisors / mentors, collaborative goal-setting.	None identified in matrix. However, participants in prison based dog training programmes report increased motivation and improved self-efficacy.	Higher motivation to engage in HAI which can then be used to develop positive supportive relationships. Confidence in skills and abilities increases through the achievement of targets and goals.

Section 4: Step 3: Develop a logic model

Describing what the intervention aims to achieve or change and how to get there is summarised as a theory of change. The articulation of how change comes about provides hypotheses about the change process and these hypotheses can be tested by assessing the critical intervening process. If supported, these hypotheses can then guide future service development to make HAI /AAI services more effective (Kasdin, 2011). Paws for Progress theory of change is summarised in Figure 2.2; problems commonly experienced by male young offenders are outlined and linked to the risks to reoffending identified in Step 2. The potential for these issues to be addressed by HAI, Paws for Progress, and the rescue dog training model are then explored, followed by an overview of the outcomes, assumptions made and external factors identified. The articulation of the theory of change is then used to develop a logic model (Step 3). The logic model should describe how evidence, funds and staff will be used to design and deliver activities and how (based on a review of the existing evidence) these activities are expected to lead to short, medium and long term outcomes (Bisset, 2015). The model should also identify external factors which could help or hinder the achievement of outcomes.

Figure 2.2: Theory of change used to develop the Paws for Progress Logic Model

Problem = Scottish male young offenders experience multiple disadvantages and are at high risk of reoffending

Problem = Low employability prospects, low impulse control (risk factors)	Problem = Low levels of literacy, few qualifications and poor engagement with education	Problem = Lacking social skills / support, low motivation, lack of confidence in abilities to contribute positively (risk factors)

What is your theory for change?

How will HAI change it?

- High level interest = tool that can then be utilised for change
- HAI = Simultaneously engage, connect, and relax
- Therapeutic value - improves wellbeing
- Provides a communication bridge and shared goal

How will Paws for Progress change it?

- Contextualise learning within topics that are interesting and relevant to participants AND benefit the dogs
- Supportive positive relationships
- Working together as a team towards shared goals, meeting many visitors, practising communication skills
- Opportunities to plan own targets and gain sense of achievement
- Gain skills and qualifications

How will the rescue dog training model change it?

- Reparation / generativity: helping others, charitable purpose, making a positive difference, volunteering
- Improved employability skills; provision of work experience
- Continuous opportunities to progress and gain experience in animal care, including in the community

Is this supported by evidence? Synthesis of HAI research and 'what works' literature

How will you know if it changes? On-going monitoring throughout development, responsive to feedback, user led approach. Multiple outcome measures and methods of assessment. Triangulate and integrate.

What assumptions are you making?

There will be a high level of interest in participating in dog training

Participants will be committed to helping the dogs in their care

Participants will continue to engage with Paws in the long term

Support in other areas will be provided (housing, drugs etc.) by other agencies

How will you know that the outcomes have been achieved?

Participants will engage with the programme and will have improved wellbeing, increased confidence in their abilities, supportive relationships, improved behaviour, skills and competencies and better employability prospects (measures are described in Chapter 3)

What external factors impact or contribute to outcomes?

Support for participants in other areas (housing, drugs, etc) Support for the prison based HAI programme (externally and at YOI) and sufficient resources available to deliver effectively

The ultimate goal? Young people realise their potential to contribute positively to their communities. Young people have improved social support, gain employment and / or access further education and training, form more pro-social identities and desist from crime.

Paws for Progress Logic Model

A Logic Model diagram shows, step-by-step, why planned activities should achieve the aims outlined. The logic model forms the basis for evaluating the project, by testing whether these steps happened as predicted. It details inputs (e.g. money, staff, resources) needed to deliver planned activities and how activities should lead to short, medium and long term outcomes and ultimately meet the aims. The long term outcomes can include wider social change that the service will contribute to, while recognising that only a collaborative approach will produce long lasting social change. In this sense, logic model outcomes vary in terms of how much influence an individual project has over these and in turn, how accountable an individual project is for achieving them.

Table 2.3: Paws for Progress: Early Stage Logic Model (2010-2011), outlining inputs, outputs and anticipated outcomes.

Paws for Progress: Early Stage Logic Model (2010-2011)					
Inputs	**Outputs**		**Outcomes**		
	Activities	**Participation**	**Short term**	**Medium term**	**Long term**
Using evidence to inform service development	Students engage in training sessions 3 times per week (2 practical)	Voluntary	Students feel they have good relations with staff	Students continue to engage with services and develop supportive relationships	Engagement with support post release
Consulting stakeholders and service users throughout development	8 week course with opportunities to continue	Young Offenders at HM YOI Polmont	Students feel motivated to attend sessions	Students' responsibilities increase: mentoring and assisting	Engagement with volunteering opportunities
	Practical skills	Selection criteria are minimal	Students gain communication skills through teamwork	Students gain interpersonal skills and improved emotional management	
Paws for Progress Programme Instructor	Education in aspects of dog care and welfare	6 new students plus potential for assistants and peer mentors	Students gain sense of accomplishment and feel motivated to take up opportunities	Increased empathy, kindness, nurturing and caring for others	Enhanced employability
Suitable facilities in HM YOI Polmont	Work based learning and experience of a work environment	10 students attend on each training session		Students have increased confidence in skills and capabilities	Enhanced engagement with further education
Money for running costs	Peer mentoring	Graduates are provided support on their return to the community	Students gain understanding of dogs and animal care	Students change behaviour, development of pro-social attitudes and positive aspirations	Reduced reoffending by Paws for Progress students
Paws for Progress Partners: Scottish Prison Service Fife College Animal charities University of Stirling	Linking to support and placement opportunities in the community (no time limit on contact)	Participating dogs are sourced from local Dogs Trust rehoming centres	Therapeutic benefits of human-animal interaction: students' wellbeing improves		

Developing Paws for Progress at HM YOI Polmont

Development began in July 2009 and, after extensive research, consultation and training, the project got underway in HM YOI Polmont in July 2011. The research identified common needs of male young offenders in Scotland and the contribution that HAI/AAI could make to their progress and development. The research included a comprehensive review of existing international evidence (including policies, reports and reviews) and a series of consultations with prison staff. This identified a need to support young men in prison, with particular emphasis on improving engagement with educational programmes, developing social competencies and overcoming low self-confidence. The Paws for Progress programme developed out of this research in collaboration with the programme partners.

Paws for Progress has pioneered the student led approach to learning, contextualising education within topics which are both relevant and enjoyable to students. Similarly, Paws for Progress was an early adopter of peer mentoring, providing both peer support for new students and opportunities for continuing students to progress and advance their skills further. The following sections provide more details of the review and consultation process and programme development, to showcase the complexities and assist understanding.

Review and Consultation Processes: Paws for Progress Development

Development began in July 2009. Following discussion with potential research supervisors at the University of Stirling, research began into prison based HAI programmes, in the UK and worldwide. The next step in the process was contacting relevant advisors (such as those with experience developing HAI programmes in prison environments) and approaching key individuals within future partnering organisations, the SPS, the University of Stirling and Dogs Trust, to discuss proposals. Having gained interest and support, full literature reviews were conducted, to evaluate understanding of the needs of rescue dogs and Scottish young offenders, and the effectiveness of HAI programmes, to develop a full research proposal.

Consultations conducted with senior management at the SPS Headquarters (e.g. Offender Outcomes, Learning and Skills) and at HM YOI Polmont, and senior

management at Dogs Trust West Calder, guided the development of the intervention. Placement experience began at HM YOI Polmont (January – July 2011). Meetings were held with the Offender Outcomes Manager, Activities Managers and Learning Centre staff. Discussion groups were held with Activities staff, and the Programmes, Youth Work, and Social Work departments. Following experience shadowing Employability and Skills Officers, Activities Officers and Learning Centre staff, regular workshops were run with groups of young offenders (e.g. introductions to clicker training, animal care, and responsible dog ownership) and focus group discussions followed each workshop. Methods of promotion and advertisement of the course were developed in collaboration with relevant SPS staff, to recruit participants. Processes for referral and selection criteria for participants were also refined following discussion groups with SPS staff and management teams.

Regular meetings and discussions with management and staff, plus training and familiarisation with the Dogs Trust West Calder Rehoming Centre were also on-going throughout this period, including familiarisation with their internal dog assessment procedures. This included development of processes for identifying suitable dogs, transport arrangements, training plans for the dogs, and structuring session plans to fit with daily routines. The class instructor (RJL) completed advanced training to compliment her previous experience as a dog training instructor (Association of Pet Dog Trainers Member 01177).

Training for RJL in 2010 included the Society for Companion Animal Studies (SCAS) Training Course: Companion animal interventions in therapeutic practice (2010), Training for the Future: Instructor Course (2010) and Dogs Trust: Advanced Dog Training Programme (2010). Placement experience was also completed at the Animal Assisted Therapy Centre, The State Hospital, Carstairs. Therapet assessments were successfully completed and a regular visiting programme began at Bellsdyke Hospital, Larbert (2010). Training during 2011 included events with the Scottish Centre of Crime and Justice Research (SCCJR) and The Robertson Trust (e.g. Criminal Justice Networking and Good Practice Sharing Event, 2011); the SPS: Basic Training (including Induction Training, Managing Hostile Situations, Personal Protection, Data Systems Training etc.), Speech and Language Therapy Training (Effective Communication for those with Support Needs), ESRC Early Career Training (Warwick University), and the Association of Pet Dog Trainers (APDT) Advanced Instructors

Course were also completed. Meetings were held with voluntary sector agencies (including Barnardo's, Families Outside, Passport, Access to Industry etc.) to discuss the planned intervention and learn from their experiences.

The extensive placement experience and training were critical to the development of the intervention. During the pilot phase (August – December 2011), the intervention and research design continued to be developed in response to the needs of the participating young people and dogs, and feedback from participants, staff and management teams. This responsiveness to need and feedback has continued to be a key factor, influencing Paws for Progress' development as a service provider.

Holistic Approach: Offender Outcomes

These consultations led to the decision for Paws for Progress to deliver a holistic approach to purposeful activity, focusing on employability, learning, skills and through the gate support, with particular relevance to following key outcomes for offenders (SPS, 2010): Improved literacy skills; Sustained / improved mental wellbeing – developing caring skills; Employability prospects increased; Improvements in attitudes or behaviours. Paws for Progress shares a number of specific goals and synergies with the ambitions of SPS in relation to young offenders:

- to deliver an holistic approach to purposeful activity, building on an individual's strengths and potential and developing caring skills

- to engage young offenders in education, leading to qualifications and improved life skills, attitudes, behaviours and aspirations

- to establish enduring trust-based relationships and strive to provide long-term support on release to help maintain engagement and enthusiasm

- to provide opportunities to engage in reparative work through charitable activities, maintaining a strong focus on helping others (including individuals, charities and animal welfare organisations) and providing peer support and mentoring to other prisoners

- to work constructively with a wide range of partners, building and maintaining relationships and networks that generate fulfilling opportunities for paid and unpaid work

The pilot phase of the project began in August 2011 and was reviewed to evaluate the suitability of the outcome measures employed, and to adapt the methods of data collection to suit this applied context (see Chapter 3; Development Methodologies).

In early 2012, these new measures were piloted, adapted and reviewed, to be used pre and post-intervention to evaluate change. Reviews of progress were also presented and discussed with the project partners and funders. In 2012, Paws for Progress developed a partnership with Carnegie College (the learning providers for HM YOI Polmont, now known as Fife College), and began to contextualise SQA units within the coursework. Following the review period, data collection resumed in February 2012, with incorporation of new measures, improved methods of retaining control groups for comparison, and enhanced levels of qualification for participants. Data collection continued throughout 2012 and 2013, with an additional 7 cycles of the course completed (42 new participants) by August 2013.

Research commenced in 2013 to examine the effectiveness of Paws for Progress in relation to participating dogs; the aims for dogs are to improve their behaviour and welfare, and increase their chances of being successfully rehomed. The 'Behaviour and Training' research project was developed and piloted early 2013, and focused on dog behaviour, monitoring training progress for dogs involved in the programme. The 'Behaviour and Welfare' research project was then developed in Autumn 2013; this involved collecting and analysing video data to determine any changes in behaviour pre and post-participation, and conducting short surveys with staff members responsible for the day to day care of the dogs. The data from these two studies provide a quantitative evidence base for changes in dog behaviour pre and post-participation in Paws for Progress, and quantify dog behaviour in a range of situations and environments (kennel, walking, interaction with other dogs etc.). Together these data inform the structure of the programme, and any changes required to promote dog welfare, training and rehoming potential; the results of this are not included in the thesis.

The experiences gained through Steps 1-4 of the 5 Step process, including the consultation and piloting stages, led to changes in format from that described in Table 2.3 (early stage logic model, 2011) to that of the logic model described in Table 2.4 (2012-2015). Changes which were made, such as increased opportunities available to

students, are highlighted. As can be seen, the resources required to effectively run the programme (inputs) are extensive, including Paws for Progress staff, and the contribution of staff time from partnering organisations (the SPS, Fife College and Dogs Trust). The activities also increased, with more training sessions, educational qualifications and opportunities for progression (mentoring in the YOI and work experience on release) available to students. These changes are expected to lead to more positive outcomes for participants; Chapter 3 describes the development of methods used to evaluate these logic model outcomes. Next in the current chapter, the format of the Paws for Progress course is described, expanding in greater detail the inputs and activities outlined in the Logic Model (Table 2.4)

Table 2.4: Paws for Progress Logic Model (2012-2015), outlining inputs, outputs and anticipated outcomes. Bold items highlight changes / expansion.

Paws for Progress Logic Model (2012-2015)					
Inputs	**Outputs**		**Outcomes**		
	Activities	Participation	Short term	Medium term	Long term
Responding to feedback to inform further service development	**Students engage in training sessions 5-8 times per week**	Voluntary Young Offenders at HM YOI Polmont	**Students feel they have good relations with staff and volunteers**	Students continue to engage with services and develop supportive relationships	**Engagement with support post release**
Paws for Progress Programme Instructors	8-10 week course with opportunities to continue **Practical skills**	Selection criteria are minimal	Students feel motivated to attend sessions **Students gain communication skills and learn teamwork**	**Students engage with education and gain qualifications** Students' responsibilities increase: mentoring and assisting	**Engagement with volunteering opportunities**
Dedicated facilities in HM YOI Polmont and staff support	Education in all aspects of dog care, welfare and law	**6 -7 new students plus up to 10 assistants and peer mentors**	**Students gain sense of accomplishment and feel motivated to take up opportunities**	Students gain interpersonal skills and improved emotional management	**Enhanced employability**
Money for running costs	**Strong focus on employability skills**	**Typically 16 students involved**	Students gain understanding of dogs and animal care	**Increased empathy, kindness, nurturing and caring for others**	**Enhanced engagement with further education**
Paws Partners: Scottish Prison Service	**Educational qualifications: Core Skills**	10 students attend on each training session	**Therapeutic benefits of human-animal interaction: students' wellbeing improves**	Students have increased confidence in skills and capabilities	**Reduced reoffending by Paws for Progress students**
Fife College Animal charities University of Stirling	**Peer mentoring** **Linking to support and placement opportunities in the community (no time limit on contact)**	**Engage with 24-30 students per year within YOI**			
Volunteers Supporting organisations		**Graduates are provided support on their return to the community (10-15 per year)**	**Students' attitudes, behaviour and aspirations change**	Students change behaviour, development of pro-social attitudes and positive aspirations	

Section 5: Course Format (2012 -2015)

Paws for Progress runs in eight-ten week cycles, with up to 16 young men taking part in 4 – 7 training sessions each week, 3 of which the rescue dogs attend. Up to 10 young men take part per session (6 new students; 4 graduates assist as peer mentors and volunteer assistants). The sessions take place in the dedicated dog training areas (indoor and outdoor). As well as working with the dogs, the participants learn team working and social skills, and gain educational qualifications. Each young offender is paired with a dog and their work is focused towards helping the dog be rehomed. Participants learn how to teach the dogs new skills using positive reinforcement techniques and learn animal care. Students design training plans using reward based methods to achieve their training goals. Students work towards the APDT Good Companion Awards, and the successful rehoming of a dog is an achievement for the handler.

During the non-practical training sessions participants learn the theory behind dog training and animal care, complete coursework and are visited by guest speakers, to discuss their work with animals and encourage the students to relate the skills they are learning to potential employment in the future. During sessions without the rescue dogs, 1 – 3 dogs belonging to the staff members are ordinarily present. Following the partnership developed with Fife College at the start of 2012, Fife College staff support educational sessions and assess work submitted for qualifications, working in partnership with Paws for Progress to ensure learning opportunities continue to expand for students. Participant learning outcomes include: SQAs in Communications, Numeracy, Information and Communication Technology (ICT) and Personal Development; portfolios for dogs, posters, adverts and digital displays (practising effective communication skills); recording and evaluation of progress, planning individual targets and goals. Celebration Events were organised regularly for the students, typically towards the end or following each course cycle. Such events provided students' families with opportunity to visit a Paws for Progress training session and see students work with the dogs. This was usually followed by a celebration of the students' achievements, with Fife College staff, SPS management teams and Paws for Progress staff presenting certificates to the students.

<u>Following Course Completion</u>

While students are taking part in the initial 10 weeks (one week induction training, eight week course and one week post completion assessment period), continued opportunities for engagement are discussed with students, and plans are agreed with programme staff. Following completion of the initial course cycle, students remaining in the YOI are offered places on subsequent cycles to assist (volunteer assistants). If participants continue to successfully engage in their new role, the opportunity to become a peer mentor on subsequent cycles is discussed. Responsibilities increase successively as students progress on the course in the long term, including organising equipment and materials for sessions, maintaining training areas, and assistance in teaching (practical and non-practical sessions) and supporting new recruits. The prison-based course is the start of a longer-term process, which continues after release. Many of the supporting organisations involved in the project provide the students valuable work experience on release. Options are discussed with students while in prison and Paws for Progress aims to link them up with appropriate opportunities once programme graduates return to their communities.

<u>Continued opportunities for progression</u>

Preparation and planning for the students' return to the community begins early in the programme, and evolves as students progress through their sentences. It is made clear to all participants that support and opportunities are available to them following release. This includes contact with the (non-SPS) programme staff, who provide guidance and assistance with CVs and applications for employment, provide references for students, and facilitate work experience and volunteering opportunities. Supporting organisations providing external speakers for course sessions and / or work experience opportunities for Paws for Progress graduates during the evaluation period included Dogs Trust, Blair Drummond Safari Park, Broadleys Veterinary Hospital, Edinburgh Zoo, Medics Against Violence (MAV), Tynewater Dog Training, Scottish Society for the Prevention of Cruelty to Animals (SSPCA), Police Scotland, Tellington TTouch UK, the Institute of Modern Dog Trainers (IMDT), the Guide Dog Association, Muiravonside Kennels and Cattery, Safe Paws and the Search and Rescue Dog Association (SARDA).

Adaptations during the development of the intervention

As the Paws for Progress intervention was user led and responsive to feedback from participants and staff, it naturally evolved, adapted and developed further over the evaluation period. From early 2012 it was agreed with the SPS management teams that 16-18 year olds would also be able to participate in the Paws for Progress Intervention alongside the 18-21 year olds (these age groups had previously been kept separate at the YOI). Due to the increasing number of continuing students (graduates from previous courses) in 2012, advanced training opportunities (practical and non-practical) were developed for such students, to ensure assistants and mentors were able to continue to progress their learning and skills, and gain further qualifications. Such changes included the addition of the next level of qualification in the SQA Core Skills units.

The changes and new developments reflected the increased resources available, such as provision of a dedicated member of SPS staff to assist with programme delivery and a dedicated training area (the Dog Training Workshop) during 2012. The number of sessions per week increased following these changes, due to demand expressed by students, and an increase in the provision of learning support staff from Fife College to assist with two sessions per week. Subsequently more qualifications became available to reflect the increased quantity of work completed as a result of the additional time available. During 2014, the assistance of Dogs Trust staff extended beyond the practical training sessions to allow for staff attendance during some theory sessions focussing on dog behaviour and training methods. However, while the session and staff numbers increased, and the training opportunities continued to expand, core principles and delivery remained consistent overall, allowing data collected through the development and evaluation to be included in most data analyses. The next Chapter describes the development and validation of the methodologies for the evaluation of the programme.

Chapter 3 - Development and validation of methodologies for evaluation of Paws for Progress

Summary

This chapter relates to development of tools/methods for short-medium term outcome measures, addressing Step 4 (Identify indicators and monitor your model) of the 5 Step approach. Paws for Progress pilot phase involved Cycles 1 and 2 (August – December 2011); the results were reviewed, and methods / measures were then refined (January - April 2012). Specifically, the chapter covers the processes followed, whilst addressing methodological challenges within this applied context. This provision of comprehensive information and guidance on the processes involved in the development and evaluation of Paws for Progress is innovative, and addresses significant gaps in previous research in this area.

Section 1a: Implementing a Human Animal Interaction (HAI) programme for Scottish young offenders serving custodial sentences.

Chapter 2 identified a need for interventions designed to improve social skills and problem solving abilities, improve self-confidence and increase social support for young offenders (Biggam, and Power, 2002; Hancock and Raeside, 2009) as well as engaging young inmates in education, developing skills which will be relevant to future employment and offering opportunities to achieve targets and goals, improving their self-respect (HMIP, 2007; HMIP, 2009; Scottish Prison Service, 2006; Scottish Parliament, 2009).   Prison based dog training programmes are reported to improve emotional, social and behavioural outcomes for male offenders (Harbolt and Ward, 2001; Merriam, 2001; Dalton, 2004; Davis, 2007; Fournier et al, 2007; Currie, 2008). Previous examples of such programmes suggest that dogs also benefit from the human interaction and training, enabling easier re-homing and thereby also offering benefits to the members of the community who adopt participating dogs. Reviews of HAI programmes in prisons are consistently positive (e.g. Lai, 1998; Deaton, 2005; Furst, 2006) although published research or evaluation of such programmes is rare. This chapter seeks to explore the issues associated with

conducting research in this applied context, and investigate effective methods for the evaluation of the Paws for Progress programme.

Section 1b: Developing and Evaluating Complex Interventions

Complex interventions contain several interacting components, and therefore present challenges in terms of evaluative design. A key question in evaluating complex interventions is whether they are effective in everyday practice; it is important to understand the whole range of effects and how they vary. Complex interventions are widely used in the health service, in public health practice, and in areas of social policy, and present various problems for evaluators, in addition to the practical and methodological difficulties that any successful evaluation must overcome. In 2000, the Medical Research Council (MRC) published a framework to help researchers and research funders to recognise and adopt appropriate methods (Campbell et al, 2000). The 2000 framework characterised the process of development through to implementation of a complex intervention in terms of the linear phases of drug development; while it is useful to think in terms of phases, in practice these may not follow a linear or even a cyclical sequence (Craig et al, 2008). Furthermore, in complex interventions, a single primary outcome may not make best use of the data; a range of measures will be needed and additional consequences picked up where possible. These guidelines have now been comprehensively revised and updated by the MRC (Craig et al, 2008). Expertise in evaluating complex interventions has accumulated since the original framework was published, and limitations were identified in the framework, leading to recommendations such as: greater attention to early phase piloting and development work; a less linear model of evaluation process; integration of process and outcome evaluation; and recognition that complex interventions may work best if they are tailored to local contexts rather than completely standardised (Craig et al, 2008). Critiques suggesting that the framework should be updated likewise recommended including a model of the evaluation process less closely tied to drug development phases; more guidance on how to approach the development, reporting, and implementation of complex interventions; greater attention to the contexts in which interventions take place; and consideration

of alternatives to randomised trials, and of highly complex or non-health sector interventions to which biomedical methods may not be applicable (Craig et al, 2008).

There are parallels between the MRC Framework for complex interventions (Craig et al, 2008) and the 5 Step Approach (Scottish Justice Analytical Services, 2014; Bisset, 2015) employed for the development and evaluation of this project. Both approaches encourage those developing a complex intervention to identify and review existing evidence, and to identify and develop the rationale for a complex intervention, considering carefully which changes may be reasonably expected to occur (the process or theory of change). Both emphasise the importance of assessing feasibility, with careful processes to identify appropriate indicators, piloting methods on a smaller scale prior to full implementation and enhancing understanding of the context in which interventions take place. Researchers are encouraged to carefully consider which research designs are suitable for the particular kind of intervention and choose on the basis of specific characteristics of the study, such as likelihood of selection or allocation bias. Multiple outcome measures are also suggested by both frameworks, to make the best use of the data and provide a more comprehensive assessment of the success of an intervention that has effects across a range of domains. However, the revised MRC framework continues to promote variants of the RCT; a definitive RCT is seen as a central step in evaluating the effectiveness of the complex intervention (phase III). While the revised guidelines acknowledge that a quasi-experimental or observational design may be considered, the quality of evidence such research generates is clearly questioned in most circumstances (Craig et al, 2008).

However, the MRC considers a process evaluation (phase IV) as a good investment to explain discrepancies between expected and observed outcomes, to understand how context influences outcomes, and to provide insights to aid implementation of the intervention into practice. In a change from the previous guidelines, the issue of additional complexity in assessing effectiveness is addressed by suggesting that there is value to be achieved through using other research methods, including qualitative strategies, to inform the development and evaluation of complex interventions. In response to the problems identified in relation to the incapacity of RCTs to take full account of the contexts within which interventions are used, and the complexity of the processes and interactions entailed in their delivery, it is proposed that

supplementing RCTs with various other methodological approaches, including the use of qualitative research strategies, provides the solution. At the heart of the assumptions embedded in the RCT methodology, the point of setting up randomised control is to artificially create a setting whereby the researcher can be confident that it is the acknowledged causal mechanism that is causing any changes identified, rather than any other factor. However, the addition of a mixed-methods approach into the evaluation of complex interventions advocated by the MRC framework, and specifically the introduction of qualitative research into that mix, suggests scepticism about the adequacy of simplistic positivist notions concerning cause and effect (Blackwood et al, 2010). Underlying qualitative research are assumptions that human beings do things for reasons, not causes, leading to an acceptance of the significance of context, as different people in different circumstances will tend to do things differently. The power of the RCT is dependent upon its capacity to approximate the closed system of the experiment where, all other things being equal, there is only one putative causal force acting upon the intervention group, and this is absent from the control group, thus allowing for a valid assessment of the efficacy of that causal mechanism. However, complex interventions in applied contexts are open systems not entirely controlled by trial protocols, in which many factors additional to the intervention itself, including those relating to environment, structure, capacity, restrictions and other situational factors, not to mention the interpretations, engagement and actions of the individuals involved, will all affect the effectiveness of the intervention (Blackwood et al, 2010). The responses of individuals are causal factors affecting the outcomes of interventions in the real world, therefore outcomes of those interventions cannot be understood without taking them into account.

Reducing Reoffending: Summary of the issues involved in conducting Randomised Controlled Trials (RCTs) in this applied context

It is well accepted that RCT is the most robust methodology to evaluate the effect of an intervention (e.g. Kazdin, 2014; Blackwood et al, 2010). In an RCT, the groups are compared in terms of the outcome of interest, with relevant differences attributed to the impact of the intervention. The randomisation and blinding procedures (conducted properly) give the RCT its strength; by avoiding all bias, differences observed following the intervention can be attributed to the intervention and not some other unidentified factor. Thus, the RCT is assumed to be free from human bias

and above scrutiny as a potential source of systematic error, and is generally placed at the top of the hierarchy of evidence with various other forms of evaluation placed beneath it (Blackwood et al, 2010).

However, this methodology is not suitable for evaluating Paws for Progress. For data gathered in a RCT to be meaningful, large groups must be studied; this is particularly imperative for comparisons of reconviction data. This is problematic because Paws for Progress like many behaviour change projects will target small populations. RCTs can't tell you why something is effective (or ineffective) so learning about how a project worked is difficult using this method. Although RCTs are acclaimed for their ability to be objective, they are by no means a solution for all health and social research, let alone research such as this, which spans health, social-emotional, behavioural, criminal justice and educational domains. The RCT is criticised for lacking ability uncover what is really happening underneath the surface of events and enable findings to be translated to 'real' practice. Furthermore, it is argued that RCTs may not ask the right question in examining attribution rather than contribution. When examining the contribution of a service to achieving long term outcomes, as with most social outcomes, reducing crime and reoffending are long term, complex goals and hard for any standalone service to achieve. For example, many studies show that the most effective way to reduce reoffending is through a well-sequenced holistic approach which addresses multiple needs such as the provision of training, sourcing quality accommodation, maintaining / building positive relationships and recovery from drug abuse. A RCT can study only a small part of a holistic approach in isolation, making it difficult to evaluate the contribution that small part makes to the whole. Therefore, an alternative approach to project evaluation was employed; the 5 Step Approach to Evaluation.

The rigorous standardisation of interventions and measurements that make an RCT so powerful also contribute to its limitations in relation to generalisation of its findings and its usefulness for certain evaluations. Although there is a presumption that the results of RCTs can be reliably extrapolated to the population in general, the effects of interventions can be very dependent upon factors such as the characteristics of participants, the setting for the intervention, and the way in which it is implemented. In relation to participant recruitment, strict inclusion and exclusion criteria have the potential to narrow the target population to the point where it

becomes unrepresentative, generating a different form of bias. Furthermore, participants' responses to and/or compliance with an intervention can be strongly influenced in practice (Blackwood et al, 2010). While RCTs attempt to eliminate these influences by excluding patients or clinicians with strong intervention preferences; by designing placebo controlled trials; and by blinding to intervention allocation, these procedures ensure only good internal validity. On the other hand, by excluding powerful social and psychological influences on participant well-being, they may lead to underestimation of the benefits of treatment in ordinary practice.

Furthermore, there are many cases where RCTs are not practical, necessary, appropriate or sufficient. These limitations become particularly acute when RCTs are used to evaluate interventions targeted at problems that have many levels of complexity (such as reducing reoffending). It follows that the success of the intervention is dependent upon the components working and functioning as one system, and determining its success will be dependent upon evaluating outcomes at different levels. The components of complex interventions act both independently and interdependently (Craig et al, 2000), so establishing cause and effect relationships is not simple. Trials of complex interventions can only provide useful information if they also explain processes and mechanisms. The following factors may influence the effectiveness of an intervention: how it was introduced, implemented and delivered; who undertook the intervention; who received it; whether or not the 'system' was set up to enable its smooth operation; or if the wider 'system' was enabling and supportive.

Evaluative design

In order to be coherent, an appropriate framework would need to be able to incorporate notions of causality in both open and closed systems (i.e. 'real world' situations and experimental trial conditions), and to be able to utilise qualitative research in a way that can enhance causal explanations while remaining true to the interpretive assumptions of the approach (Blackwood et al, 2010). For critical realism, causal relations in the real world situations where complex interventions are practised do not involve constant conjunction between a cause (the intervention) and its effect (the outcome), but instead consist of complex interactions between a number of causal forces, whose precise relationship will differ from context to

context. Critical realism emphasises that while invariant causal regularities are unlikely in open systems, the existence of causal tendencies means that patterns of partial regularity can be identified (Blackwood et al, 2010). This has influenced the development of realistic evaluation, which aims to explain the processes involved between the introduction of an intervention and the outcomes that are produced. As well as the characteristics of the intervention itself, the social processes involved in its implementation have to be understood to generate understanding of why observed outcomes may occur. In any given context, there will in all likelihood be a number of causal mechanisms in operation, their relationship differing from context to context. The aim of realistic evaluation is to discover if, how and why interventions have the potential to cause beneficial change (Blackwood et al, 2010). Realists argue that it is possible to identify tendencies in outcomes that are the result of combinations of causal mechanisms, and to make reasonable predictions as to the sorts of contexts that will be most auspicious for their success. This rejects an uncritical acceptance of simple cause and effect in the applied context; the parallels between such an approach and this evaluation are evident.

Although the MRC framework for complex interventions includes broad guidance on the use of theory, it has been criticised for the lack of emphasis on theory-driven approaches to evaluation; it contains little practical guidance for implementers and therefore complex interventions are required to develop a more comprehensive approach (De Silva et al, 2014). A prospective, theory-driven process of intervention design and evaluation is required to develop complex social or healthcare interventions, to determine which are more likely to be effective, sustainable and scalable. By adapting and integrating a programmatic design and evaluation tool such as the 5 Step Approach, research projects seeking to design, implement and evaluate complex interventions can strengthen key stages of the MRC framework. It can aid the development of interventions by providing a framework for enhanced stakeholder engagement and by explicitly designing an intervention that is embedded in the local context. For the feasibility and piloting stage, the 5 Step Approach enables the systematic identification of knowledge gaps to generate research questions that strengthen intervention design, and may improve the evaluation of interventions by providing a comprehensive set of indicators to evaluate all stages of the pathway through which an intervention achieves impact, combining evaluations of

intervention effectiveness with detailed process evaluations into one theoretical framework.

Section 2: Step 4: Identify Indicators and monitor your logic model

The logic model developed in Chapter 2 is now used to identify indicators to determine if the service delivers the predicted changes for the young people involved. Data were collected from the beginning of service delivery; recording inputs, activities, user engagement, and short, medium and long term outcomes. This chapter will cover Step 4 (Identify indicators and monitoring) started in parallel with the service and the development of methodologies.

Pilot phase: Programme Implementation

HM YOI Polmont granted full approval of the programme which was developed with their staff to ensure feasibility of implementation. Paws for Progress was introduced in July 2011, and the first course cycle began in August 2011. All procedures adhere to BPS guidelines and protocols were approved by Psychology Division Ethics Committee, University of Stirling and the Scottish Prison Service Ethics Committee.

Population and participants

In 2011, HM YOI Polmont held approximately 550-600 convicted young (< 21 years) male inmates. Class sizes include 6 new participants per session; 12 participants completed the Paws for Progress programme in the first two cycles of the course.

Recruitment

Participation was voluntary; the programme was advertised to male young offenders aged 18-21 years, via the in-house radio station, television adverts, flyers and also with the assistance of prison staff. Selection processes were minimised, to willingness to participate and ability to cope in a group environment (no requirements for previous educational engagement or record of good behaviour). Volunteers were allocated to group in a systematic non-biased manner (i.e. random assignment to Intervention / Waiting List Control groups).

Delivering the Intervention

Working under the guidance of staff, participants learn how to teach the dogs new skills and learn the basics of animal care. Training and interaction sessions were scheduled periods of approximately two-three hours, occurring on two-three days per week over an 8 week period. Progression through training stages is structured, with set targets, and opportunity to discuss and work through the behaviours exhibited by the dogs. The class instructor (RJL) received appropriate training (see Chapter 2: Section 4). Dogs were recruited from a local rescue shelter (Dogs Trust West Calder Rehoming Centre), and brought to the Young Offenders Institution (YOI) for scheduled sessions.

Ethical Considerations

Informed Consent

Procedures adhered to BPS guidelines for conducting research. Participants were given clear information (written and oral) explaining what participation will involve, including assessments pre and post-test and in the long term, and reminded of their right to withdraw at any time. Participants also receive clear information regarding risk and liability issues.

Confidentiality

Participants' right to confidentiality of information is respected; anonymity was protected throughout the intervention and research process. Anonymity was maintained in any personal data collected and stored, and in accordance with the Data Protection Act, all data was stored securely.

Dog Welfare

Increasing levels of interaction and training of shelter dogs has a significant positive effect on their behaviour, welfare and adoptability (Hennessy et al, 1998, 2002; Tuber et al, 1999; Leuscher and Medlock, 2009) and prison based programmes offer considerable advantages (Hennessy et al, 2006). Dogs and inmates are supervised at all times, to ensure welfare standards are high.

Research design and methodology

In addition to on-going feedback from inmates and staff, the pilot stage of the project was evaluated for value and applicability for future use. The intention was to use a mixed pre / post-test and between subject design to allow for clear and systematic comparisons. The suitability of this design for this applied context is examined in this chapter and further in Chapter 4 (Quantitative analysis of outcomes).

Both quantitative and qualitative methods are used to evaluate the programme's effects. Triangulating and integrating quantitative and qualitative methods in parallel (Ostlund et al, 2011) allows examination of a greater range of research questions, from 'what?' to 'how much?' to 'why?' and 'how?' (Kuper et al, 2008).

Description: Pilot Phase

The pilot phase comprised the initial two programme cycles. Participants completed an 8 week period (24 sessions) in which the intervention was delivered, following pre-test assessments and before post – test measures were obtained. The pilot phase is described in Table 3.1. Graduates from Cycle 1 continue on the programme in Cycle 2; including graduate students as mentors in prison based dog training programmes has encouraged teamwork, leadership skills and good peer relations (Merriam, 2001; Dalton, 2004). Following the pilot phase, the course format and outcome measures were reviewed; this review is the subject of this chapter.

Table 3.1: Pilot phase: Paws Intervention Group in Cycles 1 and 2

Cycle 1			Cycle 2		
Pre-test	6 new participants	Post-test	Pre test	6 new participants	Post-test
New students only			4 continuing students		
Total group size = 6 per training session			Total group size = 10 per training session		
Time in weeks = 10			Time in weeks = 10		

Pilot Phase: Dependent Measures

Paws for Progress aims to improve behaviour, increase engagement in education, develop employability skills, and enhance well-being. The following measures were employed in the pilot phase to determine efficacy in achieving these aims:

- Psychometrics: The BarOn Emotional Quotient Inventory (EQi) is a comprehensive self-report measure of social and emotional competence; full details provided below.

- Qualitative data, in the form of semi-structured interviews, to identify common themes in the participants' views of the programme and its effects.

Institutional records (disciplinary offences, previous participation in programmes / education, using the SPS data base Prisoner Records 2, PR2), Programme records (describing participation, behaviour and progress within the dog training programme) and long term measures (institutional behaviour, reconviction and post-release communication to review progress) were also monitored from the first cycle but are not analysed in this chapter (see Chapter 4 for full quantitative results).

Psychological measures are commonly used to assess prisoner behaviour and progress (Polmont programmes staff, personal communication, 2010). The intention was to collect relevant data using such assessments, whilst gathering additional information in relation to programme aims. However, measures in use were specific to goals of each treatment programme, rather than a broader psychosocial assessment, and so were unsuitable for use. Following a review of the available measures used to assess social and emotional competencies, the EQi was found to demonstrate acceptable properties using standard techniques (e.g., internal consistency, test–retest reliability, factorial validity, construct validity, discriminative validity), have UK norms available, was suitable for the age group (>17yrs), had been previously used effectively pre/post-test, and with offender populations (BarOn,1997; Hemmati et al, 2004; BarOn, 2006; Ekermans et al, 2011).

Psychometric assessments: BarOn EQi

The BarOn Model of emotional-social intelligence includes the following key components:

- Recognise, understand and express emotions and feelings

- Understand how others feel and relate to them

- Manage and control emotions

- Manage, adapt and solve problems of a personal and interpersonal nature

- Generate positive effect and be self-motivated

The EQi contains 133 items in the form of short statements with a five point response scale ranging from 'Very seldom or not true of me' to 'Very often true or true of me'. The EQi takes approximately 40mins to complete. Details of EQi scales are provided in Table 3.2.

Table 3.2: BarOn EQi: Composite Scales and Subscales (BarOn, 1997; 2006)

BarOn EQi	
INTRAPERSONAL (self-awareness and self-expression)	
Self-Regard	Self-perception, understanding and acceptance
Emotional Self-Awareness	Awareness and understanding one's emotions
Assertiveness	Effectively and constructively expressing feelings
Independence	Self-reliant and free of emotional dependency on others
Self-Actualization	Achieve personal goals and actualise potential
INTERPERSONAL (social awareness and interpersonal relationship)	
Empathy	Awareness and understanding how others feel
Social Responsibility	Identifying with social group and cooperation
Interpersonal Relationship	Establish relationships and relate well with others
STRESS MANAGEMENT (emotional management and regulation)	
Stress Tolerance	Effectively and constructively manage emotions
Impulse Control	Effectively and constructively control emotions

ADAPTABILITY (change management)	
Reality-Testing	Validate one's feelings and thinking with external reality
Flexibility	Adapt and adjust feelings and thinking to new situations
Problem-Solving	Effectively solve personal and interpersonal problems
GENERAL MOOD (self-motivation)	
Optimism	To be positive and look at the brighter side of life
Happiness	To feel content with oneself, others and life in general

Following communications at HM YOI Polmont, the EQi was considered advantageous in its comprehensiveness; a single all-inclusive measure would be preferable to completing multiple assessments.

Control Groups

As outlined in Section 1b, there are difficulties using RCTs in this applied context; however, if it is possible to use control groups, these comparisons could strengthen conclusions drawn. Two potential control groups were identified for the Pilot Phase:

- 'Constructs' is a social problem solving intervention programme, in which approx. 10 participants attend 3 weekly group work sessions over ten weeks. This group formed the 'Intervention Control Group'.

It should pointed out that the stringent selection criteria for this intervention makes it likely that there would be considerable differences between participant groups, unrelated to the intervention.

- The 'No Intervention Control Group' was formed by drawing from the volunteers who were on the Waiting List to participate in the programme. These individuals were likely to be more closely matched to the Intervention Group, having volunteered and met criteria for participation.

Data Collection

Data were collected pre/ post-participation in the programme, in the Paws Intervention group, and (no intervention) Waiting List Control Group (matched period of 10 weeks). The Intervention Control group was intended to be assessed pre

and post-participation by resident programme staff (as would normally occur), with additional measures obtained by the researcher at the same time period. Interviews were also conducted pre and post-participation for the Paws for Progress Group, to gather background information and gain insights into their experiences. Permission was granted to access the PR2 database during the evaluation period.

Figure 3.1: Intended Research Design: Pilot Phase

Aim: To improve behaviour, increase engagement in education, develop employability skills, and enhance well-being.

Male young offenders, age 18-20. Voluntary participation. One year remaining on sentence (Earliest Date of Liberation > 6mths). Supervision levels and group participation ability.

| Waiting List Control Group (N = 6) | Paws for Progress Intervention Group (N = 6) | Intervention Control Group (N = 10) |

Pre-test BarOn EQi*

Pre-test Interviews BarOn EQi*

Pre-test BarOn EQi*

8-10 weeks

Paws for Progress Course
Dog Care Education
Positive Reinforcement Training
Employability skills (K9 CV)
Teamwork and Communication
Human Animal Interaction

8-10 weeks

Post-test BarOn EQi*

Post-test Interviews BarOn EQi*

Post-test BarOn EQi*

* It was not possible to analyse the results of the EQi as intended.

Section 3: Pilot Phase Results

Participants

Paws Intervention group: Sixteen male young (18-21yrs) offenders serving custodial sentences at HM YOI Polmont volunteered for the programme and completed pre-test measures; 6 went on to complete the 8 week dog training course during Cycle 1 (random assignment to group). In total, 12 participants completed the programme during the pilot phase (Cycles 1 and 2) and completed post-test measures following course completion (see Table 3.1).

Control groups: There was a lack of coordination with the Intervention Control Group and cycles were not synchronised with Paws for Progress during the pilot stage. The EQi was trialled with one participant by programme staff and found to be too difficult for participants to complete without one-to-one assistance, and therefore too time consuming to administer.

Sixteen participants from the Waiting List Control group completed pre-test measures, however, post-test measures were not completed with the Waiting List Control group. Likelihood of those in this control group being available and willing to complete post-test measures seemed to increase if it seemed feasible they would join the intervention. Random assignment of recruits to the intervention group and the control group would be ideal for research purposes; it was not possible in practice. Assignment was constrained by additional factors, including planned participation in other activities and sentence length / parole qualifying date (PQD).

Quantitative measures

The EQi form was administered a total of 28 times, but was only completed on one occasion without continued assistance from the researcher. The main problem was difficulties with the language used, and with interpreting the meaning of the majority of the items on the scale and the response format. Furthermore, the multiple choice scoring sheets were separate from question booklets and participants had difficulty keeping track of the correspondence between items. The assessments were time consuming to complete (>1hr per participant). Feedback was consistently negative regarding the EQi. Given these difficulties, the EQi results were considered invalid and unreliable, and were not analysed further.

Qualitative measures

Following the Pilot Phase, the 12 post-test interviews were reviewed (pre-test interviews were retained for future analysis, see Chapters 4 and 5). Semi-structured interviews were conducted on a one-to-one basis, between researcher and participant in interview rooms at the YOI, at the same time as the EQi was administered. The guiding questions were open ended but specific, and were the same to all participants. Participants were asked questions about their experiences on the course, their experiences with the dogs, whether the course was as they had expected, and finally, if they had any suggestions that would improve the course. Questions were designed to be impartial and non-leading and were examined by colleagues to ensure objectivity was maintained. Interviews were audio recorded on a Casio Dictaphone (with participant consent), to allow the interviewer to attend to the respondent.

The 12 post-test interviews ranged between 2mins 30sec and 12mins 30sec in duration (mean = 8mins, median = 8min 40sec). Interviews were reviewed and relevant information was transcribed to a word document. The information presented here details the methods used to generate coding categories. The purpose of qualitative analyses was to organise and reduce the large quantity of data collected, to identify common themes in the responses (accepted qualitative methodology for studies of this size, e.g. see Turner, 2007). The process involved reviewing the transcripts, and highlighting statements sharing commonalities with responses given by other participants (initial coding). These statements were then organised according to content; similar content led to statements being coded to the same category. Each category required a minimum of 3 statements from different participants to be retained at the next stage of analyses. Categories were then labelled according to the meaning of the statements and examined for internal convergence and external divergence (i.e. internally consistent, distinct from one another, although not necessarily mutually exclusive). The emerging themes which resulted are outlined next, with three examples to illustrate each one, to ground the data in examples (Elliot et al, 1999).

<u>Pilot stage post-test interviews: Themes identified</u>

Management of emotions: Patience

> *"See when I first started it, I was like, this is gonna be pure hard because I never had any patience at all, you know, I'm bad for patience. But now I'm alright with it, because you've GOT to have patience to work with dogs, definitely.'*

> *"I noticed a change. I got more patient. I just, I learnt how to restrain it. I didn't expect to learn as much but I've learnt a fair bit off of it, about myself too."*

> *"It's more like a programme, because it teaches you how to team build, teaches you to have patience. Not just with the dogs, it teaches you to have patience with other people 'cause at the end of the day, it depends on the other people for it to work, as well as you."*

Rewarding / Sense of Accomplishment

> *"If you ask them to do it and they do it for you, it's like, YOU taught the dog to do that. It's rewarding, definitely."*

> *"It's rewarding, working with the dogs, seeing the progress she's made now to when she first came in. It's been really good to watch her go from stage to stage. And seeing how close she is to me now, how much trust she's gained with us. So that, that is the rewarding side of working with them, definitely."*

> *"Seeing the difference in them, seeing how much they change. Like with Ollie, when he wouldn't do nothing, know what I mean… And now he does anything I ask him to do, even rollovers and that! It's that sense of accomplishment."*

Improved Confidence

> *"I'm a lot more confident in myself. I've seen myself change working down with the dogs. See when I first came, I felt all nervous, I was worried about what people would think about me, what people say about me. But now, I can't stop telling people about it, about how much I enjoy it. I've got a lot more confidence*

in myself, to be who I actually am, I got more confident from working with the dogs."

"I've got a lot more confidence in myself. I didn't think it would be like that, didn't think it could change me so much. But it's good."

"It's been really good as well because of how well I've done, how much talent I've brought out about myself, so it's given me a bit more confidence about myself for the future as well."

Motivation / Aspirations

"With other things, you don't have to pay all your attention to it. With this, you have to pay ALL your attention to the dog ALL the time – it's good, it's good in a way, because you're not taking your mind off what you're doing. With English or something, you just pretend but really you're sitting there drawing and they don't know the difference, know what I mean? With this, you really pay attention and it's good in a way, it keeps you focussed, definitely."

"A lot of folk in here, it's like they're noticing they've got wee hidden talents, like … (another student) – they're finding a lot of things they'll be able to use outside. It improves your chance of employment."

'I'll use this, definitely. It's an area of work I'm determined to get into when I get out. I'll make the most of the opportunities you've made available through the course."

Social: Working with others

"At the start I was a bit… just… you know, working with folk and that? But then you get used to working with folk in this kind of thing and working with the extra folk it is actually better, 'cause it's helping you and it's advancing your training techniques, showing them and keeping on your toes about getting it right."

"I ended up being a lot more confident, like talking to new people and that. Once the dogs are there everyone just gets on with it. You see the best side of people when they're with their dog, and that makes it easier to talk to them."

"Working in a small group, it's sort of helped me to get along with people. I wouldn't have spoken to people before, but then when I did speak to them they were alright. It was good. I liked it."

Problem solving / Working independently

"It's a good work party, because you know what you're going to do, you've got it planned, you plan it yourself the week before. Getting to work it out yourself, it teaches you more. It gives you responsibility, and makes you feel good that you did it yourself. You thought it up, planned it and it worked. It feels good."

"You've planned it, it's up to you. Pre-planned, not just someone telling you to do it – so you have decided YOU want to do that. You're not just being forced to do the same thing, week in and week out. You make your own targets to aim for and get a wee bit of independence."

"It's much better than all of that (other work parties). Working with the dogs, thinking for your self –it's good that way, working out what to do for them yourself. It's a bit of freedom."

Positive effects: Mood / Well-being

"Sometimes I wake up in the morning and I feel shit. And then I come down here and I feel better. I don't know what it's all about, but it's a happy place. That sounds a bit sad, but it is! It's good down here and it's fun. It makes me feel happier being down here. It makes me feel good."

"It's seeing the changes in the dogs and getting to know them, that's what I like best. When I teach him something new, he looks happy, it's like he knows he's got it right, and it's good, it makes me feel good inside too, you know."

"It's a different in here – I feel different now than I did before - everyone is enjoying it and getting on well. Maybe we're not supposed to be happy if we're in a jail, but we're doing something good, so that must make it okay?"

Change in attitude towards dogs / training

"You don't know, when you're out there... you wouldn't think about training your dog – you wouldn't think about doing that. But what a difference it makes, know what I mean?"

"The dogs – they change the way you think and the way you act. They trust you, it's that mutual bond. You think you're helping them but they're helping you too."

"I didn't think it would be as fun. I thought the teacher would have us lined up going 'do this with your dog, do this with your dog'. But it's not, it's enjoyable and you actually learn how to train a dog yourself from scratch."

Institutional behaviour

"See 'cause I've got this, it helps me cope with being in here AND keeps me out of trouble, because there is no way I want to be put off of it."

"It's useful, definitely. And it's calmed me down a fair bit in all. See up in the halls, I'm not running about as daft, you know what I mean? I feel more settled and all that, because I'm just looking forward to when I next get to come to the dogs."

"I used to be put on report all the time, for my behaviour and that, but I've not had a single report since being on the course."

Teaching / Helping others

"It changes how you approach things. Not that I'm really violent and that, but you think, you get them to do things by giving them a row. But we're learning, we're learning it's not the best way."

"You're helping other people, doing the dog training, as well as helping the dogs. And it's not just about helping your dog. You notice changes in other people's dogs and you're involved in that, helping them get better."

"Most of us, we just go for the shout and scream approach - do this, do that. And doing what we're doing, you're learning, that's not helping or teaching, it's just making them too scared to do anything."

Relations with families and parenting skills

"I talk to my family about it all the time. My ma, she's real pleased I'm doing it, and I tell her all about my dog and what we're doing, it's good."

"It gives us something to talk to our families about, something positive. It's all we have to talk to them about. So instead of avoiding talking to them, or not knowing what you can say, you can tell them about what you're doing, about your dog, about the folk who come in to teach us, all of that. And it gives them something to be proud of you for, 'cause you're doing something good. And then we feel better too, knowing they aren't worrying so much. Before you know it, you're phoning them up 'cause you want tell them something funny or clever your dog did that day or something. You could phone any of our families and they could tell you everything about the dogs and the course!"

"Because if you can learn not to be like that with the dogs, it's gonna help you with other folk as well, just learning not to snap as much, learning to try and resolve the problem. It's like that with kids as well, when you think about it."

Enjoyment and enthusiasm for the course

"This is the most enjoyable thing I've done, I'd say. I really enjoyed it and I'd do it all again, starting tomorrow!"

"It's brilliant. I love it. It's the best thing they've got in the jail. I get excited to come down to it."

"I love to do it. I just love it. And I'd love to stay on it as long as I can."

Suggestions for improvement (majority requesting dedicated training area)

> *"You need your own place. If you had your own place it would be so much better. But that's the only thing, otherwise it's fine."*

> *"It would be better if you had your own space. More space indoors, that would make it better. But that's the only thing. Otherwise it's perfect the way it's run."*

> *"A bigger space. And maybe extra sessions, so we get more time bonding with the dogs…'*

Section 4: Review of the outcome measures following the pilot phase

Following the pilot phase, measures employed were evaluated to determine their applicability for use in the evaluation. While the EQi was not suitable due to the practical issues experienced by respondents and staff, the scales and subscales outlined (BarOn, 1996, 2006) on the measure appeared to show convergence with themes arising from the qualitative data. Emotional management, relations with others, mood and well-being, self-confidence and problem solving abilities are essential components of the emotional and social competencies of BarOn's (1997) model and measure. Similarly, these competencies are integral to the Paws for Progress programme aims. It therefore appeared that the issues lay with the practical administration of the EQi as a measurement tool, rather than with the conceptual framework upon which it is based.

Further exploration of the measures available for use to assess social and emotional competencies suggested similar issues were likely with many available psychometrics. Few measures are developed specifically towards this study population; the target variables encompassed are more limited in the measures in use (e.g. the SPSI-R; Maydeu-Olivares and D'Zurilla, 1996). Consistent understanding and interpretation of a measure is clearly critical for both validity and reliability; whilst results may diverge between offenders /non-offending populations (Hemmati et al, 2011), even within subject comparisons are not credible if this cannot be demonstrated. Time and ease completing assessments is a key consideration, for both ethical reasons (should not be a negative experience) and also for practical reasons

(necessity that assessments can be completed in a group setting). As an emerging field, there is no clear consensus on the suitability and efficacy of measures of social and emotional competencies for young people (and particularly for offenders), although reviews suggest versions of the EQi may have advantages in comparison with available alternatives (Humphrey et al, 2011). In addition to the EQi, BarOn (1995;2006) developed a shorter version, the BarOn EQi:S. This short version was piloted next, to determine if similar difficulties would be encountered by respondents.

BarOn EQi:S

BarOn's model of emotional intelligence is multifactorial and is strongly related to potential work performance. This revised version of the BarOn EQi:S contains 52 items, which are each statements answered by circling responses on a 5 point scale. The EQi:S scales and components are outlined in Table 3.3.

Table 3.3: BarOn EQi:S Scales and Components

Total EQ
Total EQ score is an indicator of overall social and emotional functioning, synthesising results of the 5 EQi:S scales – Intrapersonal, Interpersonal, Stress Management, Adaptability and General Mood.
INTRAPERSONAL (self-awareness and self-expression)
Abilities: Self-perception, understanding and acceptance. Emotional awareness and understanding. Effectively and constructively expressing feelings. Self-reliance. Achieve personal goals and potential.
INTERPERSONAL (social awareness and interpersonal relationship)
Abilities: Empathy, awareness and understanding how others feel. Social responsibility, identifying with social group and cooperating with others. Establish relationships and relate well with others.
STRESS MANAGEMENT (emotional management and regulation)
Abilities: Stress tolerance, effectively and constructively managing emotions. Impulse Control, effectively and constructively controlling emotions.
ADAPTABILITY (change management)
Abilities: Validating feelings and thinking with external reality. Flexibility, adapting and adjusting feelings and thinking to new situations. Effective problem-solving (personal and interpersonal).
GENERAL MOOD (self-motivation)
Abilities: Positive, looking at the brighter side of life. Feel content with self, others and life generally.

Additional scales / scores
Positive Impression Scale
Designed to detect overly positive self-presentation tendencies. If assessing individual performance, higher scores indicate greater need to corroborate EQi:S results with other information sources.
Inconsistency Index
Designed to evaluate the degree of inconsistency in responses to items with similar content. High scores (of 12 or above) are obtained due to individuals with unusual response styles. Scores >12 suggest probable invalid results, with significant discrepancies between items with similar content. High scores can result from poorly motivated respondents or from misunderstanding, both of which question the validity of the results.
Question 52: Responding honestly
There are 51 questions on the BarOn EQi:S, however, in the extended version (BarOn EQi used in the pilot stage) the last item is 'I responded openly and honestly to the above statements'. This item was transferred as Q52 on the EQi:S, to provide further monitoring of participants' responses.

To pilot the EQi:S, a focus group involving 5 previous participants (aged 18-20) of Paws for Progress completed the measure. Each of the 51 items was then discussed in turn, during which 'Think Aloud' techniques were encouraged (Davison et al, 1997), to gain insight into the participants' interpretation of statements, the opening description and response scale. As there are many similarities between the full version EQi and EQi:S, feedback provided by the focus group was combined with that provided by previous respondents. Whilst the reduced content was positive in reducing completion time, there continued to be a few particular items on the scale which were problematic to interpret.

Revisions

Problematic aspects included the language used on the response scale (e.g. word 'seldom' was not understood) and also for 9 of the 51 statements. Therefore the language on these items on the EQi:S (BarOn, 1995) was very slightly modified (e.g. "I'm optimistic about most things I do" was changed to, "I hope for the best about most things I do") to make the wording appropriate. Modifications were discussed and reviewed with 5 colleagues, to ensure the meaning was unchanged, whilst ensuring the language was easier to understand.

Pilot: Revised EQi:S

The focus group method described above was then repeated, firstly with the 5 members of the previous focus group at the YOI, and then with a new focus group comprised of 8 members of the waiting list control group (aged 17-20). Only one item on the scale was subsequently modified ("I have sudden strong urges and desires which are hard to control" was changed to "I have sudden strong urges which are hard to control"). Feedback on the readability of the revised version was positive.

The modified EQi:S was then piloted with a non-offender group, comprised of a voluntary sample of 6 female students aged 17-18yrs (visiting the University of Stirling from St. Thomas of Aquin's High School, Edinburgh). This sample completed both the modified and original versions of the EQi:S (counterbalanced in order, short delay of 5mins between), and were asked for feedback following completion of both measures. Results were reviewed; responses to items on both the original and revised versions of the EQi:S were identical for all participants, demonstrating reliability between versions. The modified EQi:S (see Appendix 1) was then used as an outcome measure subsequent to the pilot phase (Cycle 3 onwards) of the evaluation.

Staff Reports

It was thought that the use of interviews and survey measures with prison staff could be used to strengthen findings further by gathering convergent evidence from a range of sources (triangulation; Kuper et al, 2008). Survey measures were therefore developed to assess the participants' personal officers' perceptions regarding the potential effects of participating in the programme. However, these proved ineffective and could not be implemented in practice due to a very low response rate (only one survey respondent pre/post Cycle 3 and none for Cycle 4). Alternative approaches were considered, such as staff focus groups and one to one interviews, but due to work schedules this proved difficult to arrange and would have been time consuming to conduct.

Additional Measures

Education

During the Pilot Phase, an optional educational qualification was introduced to Paws for Progress; an SQA in Personal Development (Intermediate 1 level). This involves

participants developing a project topic, outlining tasks and goals within the project, and evaluating their feelings and abilities (strengths and weaknesses) in relation to the topic at intervals. This was introduced due to the high level of engagement demonstrated towards educational aspects of the course (e.g. completing written work to provide information regarding the rescue dog they were working with). Although optional, all participants successfully completed this SQA, relating their individual projects to the Paws for Progress programme, and highlighting progress participants felt they made in developing communication skills (both written and verbal). Further optional SQA units in Communications were then introduced on future cycles, increasing qualifications available (in partnership with Fife College). Completion of optional SQA units was subsequently included as an outcome measure. A written assessment used as a component of coursework was also introduced as a pre / post-test measure, to assess written abilities and knowledge gained regarding dog care (Topic: What does a dog need).

Employability Skills: Assessment of Needs

Improving employability skills was identified as a key aim for Paws for Progress during early development; due to issues with the BarOn EQi, this was not assessed quantitatively during the pilot phase. While the ultimate measure is employment on release, the prison authorities also felt it was important to develop a proxy measure of relevant skills for use pre / post-test, and in comparison with control groups. The umbrella term 'employability skills' includes the following:

- Social competencies
    - Effective communication
    - Interpersonal problem solving skills
    - Emotional management
- Ability to work independently and as part of a team
- Responsibility and decision making
- Problem solving
- Working towards targets and goals

An additional questionnaire measure was therefore developed (adapted from Morrow, 2008) alongside the modified version of the EQi:S, and was subject to the same process of development (piloting with focus groups of continuing students,

refinement / modification) prior to Cycle 3. The Assessment of Needs (AoN) was designed to relate specifically to social competencies relevant to future employment. The 20 items on the scale assess the individual's confidence to manage a range of interpersonal tasks, such as 'Making Friends', 'Meeting strangers each day' and 'Following Instructions'. Participants answer by circling responses on a 5 point Likert scale. Two key changes were made during the refinement process. Firstly, the response format was changed, so that the pre and post-test responses were made independently (separate pages). The second change was adjustment of terms for the 5 possible responses, which would potentially bias results by focussing on difficulties (ranging from 0 = No difficulty; 1 = Slight difficulty; 2 = Moderate difficulty; 3 = Great difficulty; 4 = Will avoid the situation if possible). Focus groups suggested participants could seek to create a favourable impression when joining the programme, and could be reluctant to admit difficulties according to this phrasing. The response headings were therefore adjusted to 0 = I would rather not do this; 1 = I might find this difficult; 2; I would manage this; 3= I would find this easy; 4 = I would find this very easy. The final version of the AoN (see Appendix 2) was used pre /post-test following the pilot phase for both intervention (cycles 3-12) and control groups.

Rosenberg Self-Esteem scale

Self-esteem is frequently examined in offender populations, both as an outcome of social factors, and an independent or intervening variable. The Rosenberg (1989) Self-Esteem scale, perhaps the most widely-used self-esteem measure in social science research, has previously been used with Scottish offenders (e.g. Chambers et al, 2000). In studies and reviews of prison based dog training programmes, improving participants' self-esteem is frequently noted as an important outcome; for example, Turner (2007) identified increased self-esteem as one of seven key themes as did Currie (2008) and self-esteem is frequently cited as an outcome in reviews (e.g. Deaton, 2005; Furst, 2006). However, self-esteem is generally a stable characteristic of adults, not readily modified by experimental manipulations (Rosenberg, 1989). Furthermore, self-esteem has no clear connection to behavioural issues (or mental health problems, Baumeister et al, 2003). There is little evidence to suggest moderating self-esteem will reduce offending behaviour (e.g., see Chapter 2; Table 2.2 for intermediate outcomes that relate to offending behaviour, in which self-esteem is absent). In order to clarify the suitability of the term 'self-esteem' as an outcome for

prison based dog training programmes (or interventions in general), Rosenberg (1989) Self-Esteem scale was employed as a pre/post-test measure from cycles 3-12 and subsequently for control groups.

Interview schedules

During focus groups to refine psychometrics (EQi:S and AoN), participants highlighted the potential for participants managing the impression given of them at pre-test, in case it affected the likelihood of acceptance onto Paws for Progress. This would lead to potential participants giving an overly positive self-evaluation, causing pre-test assessments to lack validity. From Cycle 3 onwards, it was therefore emphasised at the beginning of the interview (as well as at information sessions, preceding the assessments) that interviews and assessments bore no relation to programme selections. Additionally, a section was added to pre-test interviews to gather baseline data on education and employment history, as information was not consistently available on the database (e.g. for those serving short sentences of <4yrs).

Interview data: reliability of themes

Themes identified during the pilot stage were retained for further analysis. A research assistant then examined the transcripts from the pilot stage (Cycles 1 and 2) and independently identified themes. These were then compared with themes identified by the researcher, noting convergence and divergence in the themes. The themes identified were very similar, with differences only in terminology used (e.g. aggressive behaviour vs. institutional behaviour), indicating a high level of reliability for the qualitative thematic analysis. Full methods and analyses for the qualitative data for the evaluation are provided in Chapter 5.

Section 5: Discussion

The purpose of this exploratory study was to evaluate the experiences of Paws for Progress participants and develop suitable methods and measures to assess the efficacy of the programme in improving participant outcomes. This evaluation presents challenges, particularly given that previous studies have tended to use

qualitative methods and also have not been conducted in the UK. The aims of the Paws for Progress programme are to improve behaviour, increase engagement in education, develop employability skills, and enhance well-being. There is not an established psychometric measure of employability skills for use with Scottish male young offenders. It was therefore critical that an exploratory study was conducted first, to determine the suitability of proposed outcome measures for use.

The BarOn EQi is a widely used self-report measure of employability skills, based on the BarOn model of socially and emotionally intelligent behaviour, which has previously been used with offenders and as a pre-test / post-test measure (BarOn, 1995; 2006). The BarOn EQi has been validated for use with UK populations, is suitable for the age group and has been tested for reliability and cross-cultural validity with a Scottish sample (Ekermans et al, 2011). However, difficulties were encountered when administering the BarOn EQi in this study with Scottish male young offenders. These difficulties related to time taken to complete the assessment, and with understanding the language and interpreting the meaning of the items. Similar issues regarding the validity of the EQi for use with offenders were highlighted by Hemmati et al (2004), who suggested offenders require distinct norms due to differences in interpretation. As the conceptual framework on which the BarOn EQi was based was suited to the purposes of the study and the EQi:S (the short version form) could negate the issue of time considerations, this was piloted as a potential replacement with focus group samples. Necessary modifications were made, following which the EQi:S was deemed more suitable for use with this population.

This study also used semi-structured interviews to gain an in-depth and detailed understanding of the experiences of Paws for Progress participants. Thematic analysis was used to locate common themes, coding extracts of data according to content, and interpreting meaning from examples in the data. As an exploratory study, such methods are appropriate to the purpose, providing rich data from a limited number of participants. According to guidelines provided by Elliot et al (1999), research using quantitative or qualitative methods should have explicit scientific context and purpose, appropriate methods, specification of methods, conform to good ethical conduct, provide appropriate discussion of the research contribution, clarity of presentation and contribute to knowledge. In addition, Elliot et al (1999) provide guidelines particularly pertinent to qualitative research. These

include situating the sample, grounding in examples, accomplishing specific research tasks (whilst recognising this does not provide a general understanding) and resonating with the reader. The current study aimed to follow these guidelines, and triangulate and integrate quantitative and qualitative methods in parallel (Ostlund et al, 2011).

An important aspect of the qualitative research in this study involved assessing the similarities between themes generated by Scottish male young offenders in this particular dog training programme, and those identified at different study sites in America. When developing suitable quantitative measures for use, it was important to generate hypotheses from other exploratory studies (e.g. Currie, 2008; Turner, 2007) whilst also recognising that there may be differences between those and the current sample. By conducting this exploratory study, we were able to develop a range of measures which are both feasible in practice and relevant to research aims. This has further informed anticipated outcomes of the logic model (Step 3) and the identification of indicators and monitoring of the model (Step 4); this is illustrated in Table 3.4: Logic model outcomes (Monitoring / Indicators). The review of the pilot phase also provided valuable insights into required inputs and activities. For example, the pilot phase highlighted need for dedicated space (by staff and in participant interviews), which was achieved in August 2012. This was an important component of the development process, demonstrating responsiveness to feedback provided in collaboration with the partnering organisation. Combining the respective strengths of each approach and triangulating and integrating quantitative and qualitative methods in parallel offers greatest potential in providing a comprehensive evaluation of the programme.

Table 3.4: Logic model outcomes: Monitoring / Indicators. The relation of each outcome to programme aims is annotated in blue: improve behaviour (BEH), increase engagement in education (EDU), develop employability skills (EMP), and enhance well-being (WB).

Outcomes and Monitoring / Indicators					
Short term	**Monitoring / Indicators**	**Medium term**	**Monitoring / Indicators**	**Long term**	**Monitoring / Indicators**
Students feel they have good relations with staff and volunteers EMP / WB	Programme records[1] Interview responses[2]	**Students continue to engage with services and develop supportive relationships** EMP / WB	Continued engagement with Paws[1] and Interview[2]	**Engagement with support post release** EMP / WB	Support after release is recorded[1]
Students feel motivated to attend sessions EDU / WB	Programme records indicate attendance[1] Interview[2]	**Students engage with education and gain qualifications** EDU	Written Assessment [1, 2] Engagement from records[1] Qualifications achieved[1]	**Engagement with volunteering opportunities** EMP	Record continued engagement with Paws[1]
Students gain communication skills and learn teamwork EMP	Assessment of Needs (AoN) [1] and EQi:S[1]. Interview[2]	**Students' responsibilities increase: mentoring and assisting** EMP	Continued engagement after completing initial course[1] and Interview[2]		Engagement with volunteering from programme records[1]
Students gain sense of accomplishment and feel motivated to take up opportunities EDU / EMP / WB	Engagement with learning / further opportunities[1] Interview[2]	**Students gain interpersonal skills and improved emotional management** EMP	AoN[1] and EQi:S[1] Interview[2]	**Enhanced employability** EMP	Status and Activity after release at 6month, 1 year and 2 year follow up[1]
Students gain understanding of dogs and animal care EDU	Interview[2], Written Assessment[1, 2] and coursework[1, 2]	**Increased empathy, kindness, nurturing and caring for others** BEH /WB	Interview[2]	**Enhanced engagement with further education** EDU	Status and Activity at 6month, 1 year and 2 year follow up after beginning programme[1]
Therapeutic benefits of human-animal interaction: students' wellbeing improves WB	Interview[2] and EQi:S[1]	**Students have increased confidence in skills and capabilities** EMP / WB	AoN[1], Rosenberg Self-esteem[1], and Interview[2]	**Reduced reoffending by Paws for Progress students** BEH / EDU / EMP /WB	Reconvictions resulting in returns to custody within 2 years of release[1]
Students' attitudes, behaviour and aspirations change BEH / EMP / WB	Behaviour in disciplinary reports[1], Attitudes and aspirations: Interview[2]	**Students change behaviour, development of pro-social attitudes and positive aspirations** BEH / EMP / WB	Behaviour in disciplinary reports[1]. Attitudes and aspirations: Interview[2]		

[1] Quantitative measure; [2] Qualitative measure.

Project Evaluation

Employing a mixed between and within-subject pre-test/post-test repeated measures design will enable the effects of the programme to be clearly interpreted. Reviewing qualitative data following the Pilot Phase assisted in the programme's development. In Chapter 4, quantitative statistical methods employed allow comparison of between and within group differences. Analyses of the historical information available for participants is used to examine group differences (e.g. sentence length) to avoid confounding effects regarding group differences unrelated to the intervention. Gaining more information about the effects the dog training programme in comparison to other interventions could assist in determining which particular components are most effective in improving outcomes for male young offenders. Qualitative research methods increase our understanding of the perspectives of the young people involved (see Chapter 5).

Whilst alternative evaluative designs were considered (e.g. the MRC framework for complex interventions, see Section 1), these were less applicable to this study than the 5 Step Approach recommended by the Scottish Justice Analytical Services, which is widely used and recommended by the Scottish Prison Service, Scottish Government, Criminal Justice Voluntary Sector and key funders in this area. The evaluative design selected allows for synchronisation with the complex nature of the intervention and the specific context of criminal justice in Scotland, and has strong parallels with alternative approaches to both the development and evaluation processes. These research findings will be of wide relevance to the expanding field of HAI research, seeking to bridge the divide between common practice and scientific enquiry in the development of prison based dog training programmes.

Chapter 4 – Quantitative analyses of short, medium and long term outcome measures for Paws for Progress participants and control groups as applicable, to determine mechanisms for success

Summary

This chapter will use quantitative analyses to determine the efficacy of the Paws for Progress programme in achieving the short, medium and long term outcomes which are anticipated, thereby beginning Step 5: Evaluation. Statistical analyses are used to assess the outcomes of the Intervention Control group and the Waiting List Control Group as applicable, to strengthen conclusions drawn regarding the specific effects of the Paws for Progress Intervention. This evaluation of outcomes will assess the Paws for Progress Logic Model developed in Chapter 2, review the methodologies for programme evaluation developed in Chapter 3, and inform the discussion and conclusions of Chapter 6.

Section 1a: Introduction

In the last two decades, prisons in America, Canada, Australia and Europe have introduced Prison Animal Programs (PAPs). While these programmes have received a largely positive community response and many programs are considered to have an observable benefit, the impact on programme participants is less clearly documented. Well-designed evaluative studies are rare, and consequently the common benefits for prisoners are yet to be identified, which also hampers the development of programmes with greatest potential for efficacy. The lack of published research evidence combined with the continual introduction of new programs (without evaluation) has led a recent evidence review to suggest that this is a case of the tail wagging the dog (Mulcahy and McLaughlin, 2013).

The most common PAPs in the USA are the community service design, where homeless animals (usually dogs) are prepared for adoption into the community and the service animal design (specialist training for a service role); such programmes have been implemented in the majority of the states in the USA (Furst, 2006). In contrast, Paws for Progress was the first community service design to be introduced

in the UK. Whilst there is a growing body of studies indicating a positive relationship between human-dog interaction and human health, the study of the relationship between human-dog interaction and prisoner outcomes has not received the same attention. Of the published work describing the benefits of PAPs, anecdotal commentaries are more common than structured evaluations (Deaton, 2005; Strimple, 2003). If PAPs are to be introduced more widely in the UK, these anecdotal claims need to be substantiated by research evidence.

Section 1b: Step 5: Evaluation: Purpose

The evaluation described in this chapter will provide the first comprehensive quantitative analysis of short, medium and long term outcomes for participants in a prison based dog training programme. The aims of the Paws for Progress intervention programme are to:

 a) improve behaviour (in the institutional environment and in the long term)

 b) increase educational engagement (attitudes to learning, progress and achievements)

 c) develop employability skills (social competencies; emotional management; ability to work independently and as part of a team; responsibility and decision making; problem solving; working towards targets and goals)

 d) enhance well-being (motivation, self-efficacy and positive pro-social focus)

This chapter focuses on the first 3 aims of the Paws for Progress intervention programme. Quantitative measures were collected over a three year period, to assess the efficacy of the intervention in meeting these aims (as shown in Table 3.4: Logic model outcomes). Institutional records were accessed to measure changes in behaviour and educational engagement; such measures are objective and relatively easy to obtain as this involves utilising standard record keeping, thereby minimising potential bias. Self-report measures (psychometrics / questionnaires) were used pre and post-test to measure development of skills and competencies; this information provides valuable insights into perceived changes as a result of participating in the programme by those involved. Triangulating changes in the self-report measures

with the objective records strengthen the conclusions which can be drawn regarding the programme's effects.

The Criminal Justice and Behavioural Change 5 Step approach to programme evaluation was employed for this study (see Chapter 2); the anticipated outcomes of the Logic Model and the quantitative measures used to evaluate success in achieving these outcomes are described in Table 4.1 (see also Chapter 3: Section 5). This approach takes the constraints of the applied context into account (such as small sample sizes; substantial sample sizes and longer time periods required to effectively compare reconviction rates) and focuses primarily on measuring short and medium term outcomes, using these results to inform expectations regarding long term outcomes. However, whilst it is difficult to provide meaningful comparisons on long term outcomes, control groups were utilised in the current study, comparing their progress with that of Paws for Progress participants on short - medium term outcomes where possible, thereby strengthening conclusions that any changes observed result from participating in the Paws for Progress Intervention.

Research Questions

1. Does Paws for Progress improve the participants' behaviour?
Hypothesis: Paws for Progress will improve the participants' behaviour in the institutional environment.

2. Does Paws for Progress increase engagement with education?
Hypothesis: Paws for Progress will increase engagement with positive learning opportunities, leading to enhanced skills and attainment.

3. Does Paws for Progress lead to improved employability skills?
Hypothesis: Paws for Progress will have a positive impact on the student's perception of their social and emotional competencies, and their confidence in their abilities, leading to improved employability skills and enhanced employment prospects.

Table 4.1: Logic model: Anticipated outcomes: Quantitative Monitoring / Indicators (for full logic model incorporating qualitative methods, see Chapter 3: Section 5, Table 3.4)

Outcomes and Monitoring / Indicators					
Short term (0-8wks)	**Monitoring / Indicators**	**Medium term (2-4mths)**	**Monitoring / Indicators**	**Long term (6mths-2yrs)**	**Monitoring / Indicators**
Students feel motivated to attend sessions	Programme records indicate attendance and retention.	**Students continue to engage with services**	Programme records of continued engagement with Paws for Progress.	**Engagement with support post release**	Record continued engagement with Paws for Progress.
Students gain communication skills and learn teamwork	Assessment of Needs (AoN) and BarOn EQi:S.	**Students engage with education and gain qualifications**	Written Assessment. Engagement from records. Qualifications achieved.	**Engagement with volunteering opportunities**	Engagement with volunteering from programme records.
Students gain sense of accomplishment and feel motivated to take up opportunities	Continued engagement with learning opportunities.	**Students' responsibilities increase: mentoring and assisting**	Frequency of continued engagement after completing initial course.		
				Enhanced employability	Status and Activity after release at 6month, 1 year and 2 year follow up.
Students gain understanding of dogs and animal care	Written Assessment 'Fulfilling Dogs' Needs'.	**Students gain interpersonal skills and improved emotional management**	AoN and EQi:S.		
				Enhanced engagement with further education	Status and Activity at 6month, 1 year and 2 year follow up after beginning programme.
		Students have increased confidence in skills and capabilities	AoN, Rosenberg Self-esteem.		
		Students change behaviour	Institutional Behaviour in Disciplinary Reports received.	**Reduced reoffending by Paws for Progress students**	Reconvictions resulting in returns to custody within 2 years of release.

Section 2: Research design and methodology

Evaluation: Phases

The evaluation of Paws for Progress took place between July 2011 and July 2014. Initial piloting of the methods occurred between July 2011 – December 2011 (Cycles 1 and 2). Refinement of the methods of assessment and further piloting took place from January to April 2012. These processes are described in full in Chapter 3 (Section 3 and 4). The next phase of the evaluation involved employing consistent methodology from Cycles 3 through to Cycle 12. Historical information, baseline data (including institutional behaviour) and qualitative data (see Chapter 5) were gathered for all participants from Cycles 1 to 12, as were long term follow up measures (including reconvictions). Psychometrics, questionnaires and educational progress were measured comprehensively from Cycles 3-12 only.

An alternative intervention programme (a social problem solving offending behaviour programme) was employed as an Intervention Control Group. Historical information, baseline data (including institutional behaviour) were gathered for participants for 4 cycles of Constructs, and a single long term follow up measure (reconvictions). Psychometrics and questionnaire data were also collected pre and post participation for 4 cycles.

A Waiting List control group was also assessed across 8 cycles using the psychometrics; however as the majority of this group became participants in Paws for Progress additional measures were not possible for use in comparison. A summary of the methods according to the Paws for Progress, Intervention and Waiting List control groups is provided in Table 4.2.

Research Design

A mixed between and within-subject pre-test/post-test repeated measures design is used to examine the immediate and longer term outcomes of the programme. Piloting methods and reviewing qualitative data assisted in the developments and refinements made. This has allowed consistency in the data collection for Cycles 3-12. Quantitative statistical methods are employed to compare pre and post-intervention measures, and allow comparisons between groups. Analyses of the historical information available for participants is used to examine group differences (e.g. crime

committed, sentence length) to avoid differences between Intervention groups confounding the results. Examining the outcome measures in comparison to another intervention and waiting list control group will further determine whether the Paws for Progress intervention is effective in improving outcomes for male young offenders serving custodial sentences.

Figure 4.1: Research design and methodology
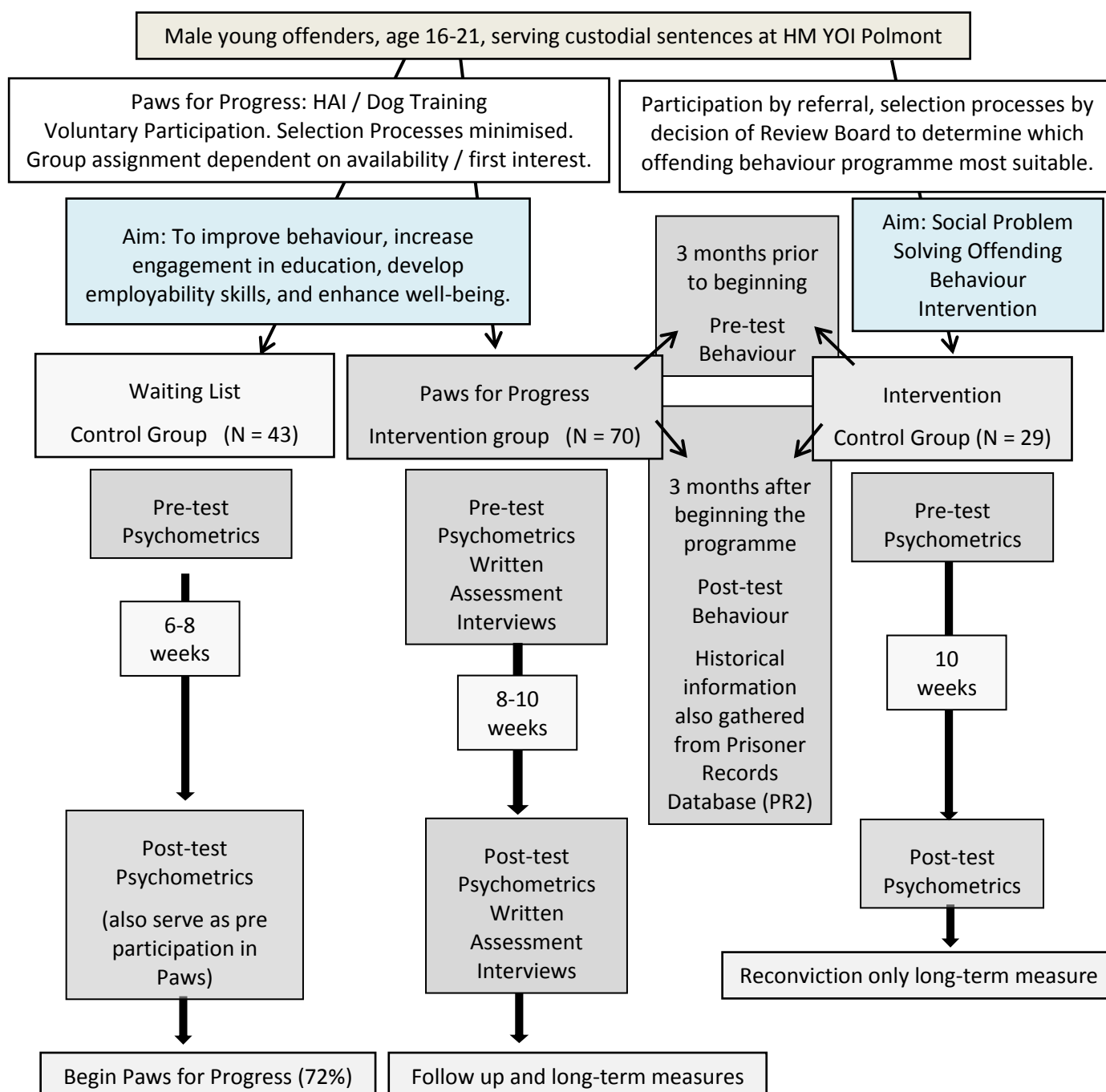
Table 4.2: Summary of Methods

Measures	Methods and data collection schedule	Description	Paws for Progress	Intervention Control	Waiting List Control
Interviews	Pre-test interviews prior to beginning programme (within 6 weeks).	Participants' histories, including activities attended, previous experiences of learning, employment, dogs.	Yes	No	N/A*
	Post-test interviews (typically ten weeks after pre-test).	Participants' feedback on the course.	Yes	No	N /A*
Participant background data	Collated from the prison records database (PR2) at least 6mths post participation.	Including offending behaviour, education, employment, and social services involvement etc.	Yes	Yes	N/A*
	Self-report by participants prior to beginning the programme.	To verify participants' activities at the YOI and educational history to validate / expand PR2 data.	Yes	Yes	N/A*
Behaviour: Institutional records	Information collected from the prison records database, (PR2 (at least 6mths post participation).	Behaviour is measured by disciplinary reports received in 3 month period pre and post beginning the programme. Participation in other activities at the YOI. .	Yes	Yes	N/A*
Psycho-metrics	BarOn EQi:S (measure of social and emotional competencies) completed pre and post participation (typically 10 week interim for intervention groups, and 6-8 weeks for Waiting List).	Measure social and emotional competencies pre and post participation in the intervention (or comparable time period).	Yes Cycles 3-12	Yes – Cycles 1-4	Yes
	Assessment of Needs (AoN) (measure of confidence in social skills in a work environment) – completed as EQi:S.	Skills relevant to employment pre and post participation in the intervention.	Yes Cycles 3-12	Yes – Cycles 2-4	Yes
	Rosenberg Self-esteem– completed as EQi:S.	Self-esteem pre and post participation in the intervention.	Yes – Cycles 3-12	Yes - Cycles 2-4	Yes
Education	Writing analyses – completed pre and post-participation.	Understanding of dogs. Written communication abilities.	Yes	No	No
	Progress and Qualifications.	Qualifications gained during intervention	Yes	N/A	N/A
Long term follow up	Reconviction collected from PR2.	Reconvictions leading to custodial sentences, within 2 years from release.	Yes	Yes	N/A*
	Post-participation / post release: collected through communication with participants and from PR2. 6 months, 1 year and 2 years after beginning the programme/ being released.	Status and Activity following completion of the programme (including prison / community, employment etc.).	Yes	No	N/A*

* N/A = Most (72%) of Waiting List Control become participants in Paws for Progress so are not an independent group.

<u>Study Site and Participants</u>

HM YOI Polmont is Scotland's national facility for male young adults (16 to 21 years) who are either awaiting trial or are convicted young offenders, serving all sentence lengths up to and including life. Over the evaluation period, HM YOI Polmont held approximately 350-700 convicted young (</= 21 years) male inmates. Only convicted offenders serving custodial sentences participated in this study (no untried / remand prisoners). The average sentence length is between two and four years (HMIP, 2012, 2014).

<u>Paws for Progress</u>

Recruitment

Participation is voluntary; the programme is advertised to all male young offenders, via the in-house radio station, television adverts, during prison induction sessions, and also with the assistance of prison staff (caseworkers, personal officers, learning support staff etc.). Sign-up sheets are provided in residential halls and the learning centre; completed sheets are passed onto programme staff. Alternatively, staff members contact programme staff on behalf of interested young people. Programme staff compile a waiting list of potential candidates and checks are made via the prisoner records database (PR2) to determine candidates' ability to participate in the intervention programme (availability, sufficient time to complete, and ability to participate in the group context). Potentially suitable candidates are then requested for attendance at an Information Session.

Informed Consent

Information Sessions were held for those interested in participating, during which the course format / content and evaluation were discussed with potential participants. Information and Consent sheets were provided (for both the intervention and the research evaluation) which were explained in full and any questions answered. All procedures adhere to BPS guidelines; protocols were approved by Psychology Division Ethics Committee, University of Stirling and the Scottish Prison Service Ethics Committee.

If candidates agreed to participate, their availability to attend the intervention was discussed with programme staff to check for current or upcoming conflicting

activities. Participants were assured of their place on the programme as soon as possible, and were also assured that their participation in assessments bore no relation to who would be selected to participate first. Participants then completed pre-test assessments, including interviews.

Selection processes

From the candidates who had provided informed consent to participate, selections were made by programme staff. The selection processes aimed to identify those who would be in most need of intervention in a systematic non-biased manner; however, random assignment of volunteers to the intervention groups and waiting list control groups was not possible in practice. Programme staff prioritised participants for assignment to the intervention group according to those who indicated interest first, those with insufficient time left to serve (to wait until the next programme cycle before beginning the programme), and those who had current availability to attend (i.e. not currently participating in a conflicting activity, such as the intensive offending behaviour programmes). Remaining participants were assigned to the Waiting List Control Group, for inclusion in a later cycle of the intervention.

Whilst programme staff were responsible for selecting participants and assigning to groups, the opinions of prison staff and managers were taken into account during selection processes. For example, if a member of staff expressed concern for a young person and suggested it was critical that they were provided with a positive opportunity to engage sooner, that participant would be prioritised for the next cycle of the intervention. It is important to note that selection for the programme was never conditional upon prior good behaviour; in contrast, young people whose behaviour had been a cause of concern were more likely to be referred to the programme by prison staff. Type of criminal offence was not a selection criterion, except those with a recorded conviction of animal abuse were excluded (no recorded cases occurred in practice).

Paws for Progress Intervention participants

Seventy male young (16-21yrs) offenders serving custodial sentences at HM YOI Polmont completed the programme over the evaluation period (12 course cycles). The completion rate for participants from Cycles 1-12 was 70/74 (95%); 4

participants did not complete the programme (3 transferred to adult prisons prior to completion, 1 withdrew from programme due to impending release).

Although there were changes (particularly in resourcing of the programme) following the pilot phase, the basic course design and delivery remained consistent throughout; the Paws for Progress participants are considered as a whole for the analyses reported, with exceptions made only where there is valid reason to expect differences between cycles would impact on the results described (such as number of qualifications gained). Additional details regarding programme design and format are provided in Chapters 2 (describing the context /development of the programme) and 3 (describing the methodologies developed for evaluation).

Intervention Control Group

During the evaluation period, the offending behaviour programmes available to mainstream prisoners were Constructs, Care of Anger Related Emotions (CARE) and the Substance Related Offending Behaviour Programme (SROBP). Although there are substantial differences between the focuses of these offending behaviour interventions and that of the Paws for Progress intervention, Constructs bore most similarity to the Paws for Progress intervention in that it was a set time length of ten weeks (rather than a rolling programme), with a comparable number of sessions (typically 3 mornings per week) and with similarities in some of the aims, namely to improve social problem solving skills and emotional management, although these were related directly to offending behaviour. However, this Intervention did not have educational or employability aims; therefore does not relate to two of the aims of the Paws for Progress Intervention.

Intervention Control Group Participants

There were 44 participants from Cycles 1-5 of the Constructs Intervention. In the third cycle of the Intervention Control data collection, it was not possible to collect post-test measures (7 participants). From the remaining 37 participants over 4 intervention cycles, there were 6 participants who did not complete the programme (31 completed, 84% completion). Two participants' data were removed due to also completing Paws for Progress, giving a total of 29 Intervention Control Group participants available for analyses.

Recruitment, selection processes and informed consent

Constructs intervention programme operates through a process of referral and review. A Review Board considers the referrals made for individuals to attend offending behaviour programmes and reaches decisions regarding the highest priorities in relations to the risks and needs of individuals, and assigns participants to the programmes. Programme staff then discuss the programme with the individuals selected and confirm the candidate's decision to accept or refuse their place on the programme. Short term offenders typically do not qualify for referral or assessment for offending behaviour programmes. Long term offenders typically complete offending behaviour programmes later in their prison sentence, in preparation for release. Therefore, participants in Constructs at HM YOI Polmont are generally offenders with sentences of four years and over, who are approaching the end of their time in custody. Decisions of the Review Boards, selection for offending behaviour programmes and records of completion are recorded in the prisoners' case management and are relevant to future decisions made by Parole Boards and case supervisors, which likely influences participants' engagement.

Candidates selected to take part in the Constructs Intervention programme attend an introductory session led by programme staff, during which they complete pre-test psychometric assessments as part of the introduction process. The researcher (RJL) attended such introduction sessions, and explained that she was evaluating the Paws for Progress programme, and hoped to compare the results with those of another intervention available at the YOI. The researcher explained that participating in this research would involve completing additional assessments pre and post participating in Constructs, and granting permission for the researcher to collect information about them, which would remain confidential and anonymous. Information and Consent forms were provided, which were discussed and any questions answered.

Section 3: Background and history of the sample

<u>Methods of Data Collection</u>

Pre-test Interviews

Pre-test interviews were used to gather further information about participants' backgrounds, including attendance / experiences at other activities at the YOI and learning / employment histories. Interviews were only completed by Paws for Progress participants; pre and post-test interviews followed a similar format (see Appendix 3 for schedules).

Prisoner Records database

Information was gathered from the Prisoner Records database (PR2) to provide details regarding the participants' history, including the following:

<u>Sentence:</u> start date, sentence length, time in prison before beginning programme, parole qualifying date, earliest date of liberation (EDL).

<u>Offence:</u> Current index offence(s), previous convictions and previous custodial sentences.

<u>Education and employment history</u> (where available).

<u>Childhood history:</u> including involvement with social services, pre-16yrs offending behaviour (where available).

Data collected were recorded on score sheets (anonymous with numeric identifiers) and categorised for data entry.

Information Sheets

Information sheets were also given to participants (intervention and control groups) for completion alongside pre-test assessments, to verify historical information. These included: attendance at any education at the YOI and any qualifications gained, school history and previous dog ownership. The information provided was checked against the pre-test interviews (Paws for Progress only) and the records available on PR2.

National Pupil Database (NPD)

The learning providers at HM YOI Polmont allowed access to the educational records of students participating in Paws for Progress (with the prior consent of participants). The reports include information about pupils' prior attainment and progression for all schools, sixth-form and FE colleges and (where available) independent schools. These reports were then used to verify the prior educational attainment of Paws for Progress participants. This information was not accessible / applicable for Control Group participants, limiting comparisons on educational attainment.

Section 3a: Historical information and description of the sample of participants

As the Waiting List Control group were not independent from Paws for Progress participants (overlap with 72% becoming Paws for Progress participants) this information was collected for Paws for Progress and Intervention Control participants only.

Participants' Age

Paws for Progress: There were 70 participants who completed the programme, all of whom were aged between 16-21 years when they began the course; 11 participants (15.7%) were under 18yrs and 59 participants (84.3%) were aged between 18-21yrs.

Intervention Control Group: There were 29 participants who completed the programme, all of whom were aged between 18-21 years at the time of beginning the programme (not available to under 18s).

Multiple Disadvantages

Learning History

Paws for Progress: As shown in Table 4.3, there were only 20 (29%) Paws for Progress participants who were 16 years or over when leaving formal education in a school environment. There were 44 (63%) participants who left school under the age of 15 (5 participants not included in analysis due to pre-16yrs custodial sentences). Just over half of the participants (56%) completed their secondary school education

in the mainstream system, whilst the remaining participants were in residential units, secure units or involved in alternative education provision in the community. There were indications of difficulties and issues during secondary education in the records of 59 (84%) participants. Only 12 (17%) attended further education or training (non-compulsory education). Almost half of the participants (47%) had no previous qualifications prior to beginning Paws for Progress.

Intervention Control Group: Almost two thirds left school aged 16 years or over (59%), although there were still a considerable percentage who left school under 15 years (38%). Similarly there were over two thirds who completed their secondary education in mainstream schools (66%). There were indications of issues during secondary education in the records of 20 (69%) participants. However, almost three quarters of Intervention Control participants had gained qualifications previously.

Table 4.3: Participants' Learning History

Categories	Paws for Progress Participants		Intervention Control Group	
	Frequency	Percentage	Frequency	Percentage
School Leaving Age (yrs)				
16+	20	29%	17	59%
15	1	1%	0	0%
14-15	31	44%	9	31%
<14	13	19%	2	7%
N/A (serving custodial sentence)	5	7%	1	3%
School Attended				
Residential	6	8%	3	10%
Secure	11	16%	2	7%
Mainstream	39	56%	19	66%
Alternative	11	16%	5	17%
No record	3	4%	0	0%
Recorded Difficulties at School				
Unknown	3	4%	0	0%
Yes	59	84%	20	69%
No	8	11%	9	31%
Attended further education / training (non-compulsory)				
Yes	12	17%	10	34%
No	58	83%	19	66%
Number of previous qualifications				
0	33	47%	8	28%
<3	14	20%	2	7%
3-5	10	14%	5	17%
6-10	10	14%	6	21%
11-15	1	1%	0	0%
Qualifications indicated but number not recorded	2	3%	8	28%
Highest level of qualification gained previously				
No qualifications	33	47%	8	28%
Access	1	1%	0	0%
Intermediate	8	11%	1	3%
Standard grade	28	40%	20	69%

Previous employment and work experience

Paws for Progress: Before being held in custody, 18 participants (26%) had experienced previous regular employment (i.e. had been employed for >1 month). However, 52 participants (74%) had no previous experience of regular employment. There were 32 participants (46%) who had gained some previous work experience through work placements / training courses / short term employment, while 35 participants (50%) had no previous work experience of any kind. For 3 participants (4%) this information was unknown or unclear.

Intervention Control Group: Before custody, 14 participants (48%) had experienced previous regular employment (i.e. employed for >1 month). There were 15 participants (52%) who had no previous experience of regular employment. There were 17 participants (59%) who had gained some previous work experience through work placements / training courses / short term employment, while 12 participants (41%) had no previous work experience of any kind.

Additional details: Participants' Histories

The frequencies and percentages described in Table 4.4 are likely a considerable underestimation; these figures represent only those stated on the prisoner records, due to being highlighted through participants' experiences in the Criminal Justice System. Many short term prisoners' records are more limited, and the data described in this table are not consistently recorded.

Paws for Progress: As shown in Table 4.4, 28 (40%) of the participants' records indicated a history of Mental Health issues, although a lower number were currently accessing support in the YOI. There were 16% who had been monitored in the YOI under the Suicide Risk Management Strategy (Act & Care). At 93%, the percentage of Paws for Progress participants with a history of substance abuse was very high. However, only 64% were accessing support for this in the YOI. Three quarters (76%) had previous convictions, and almost half of the Paws for Progress participants (46%) had previously served custodial sentences. Offending behaviour began in childhood for over half of the participants (56% with indications of involvement with the Criminal Justice System prior to the age of 16 years). At least 61% of the Paws for Progress participants experienced significant adversity during their childhood,

including being raised in care, suffering trauma, childhood neglect or abuse, and significant bereavement.

Intervention Control Group: There were high percentages of Intervention Control participants with histories including substance abuse and offending behaviour, although in general these percentages did not appear to be as extreme as the Paws for Progress group. However, there was a similar majority of Intervention participants who had suffered significant adversity at a young age, with at least 66% experiencing adversity during their childhood.

Table 4.4: Participant Histories: Frequency of occurrence of categories (categories are not mutually exclusive)

Categories recorded on the prison system data base (PR2)	Paws for Progress Participants (N=70)		Intervention Control Group (N=29)	
	Frequency	Percentage	Frequency	Percentage
History of mental health issues	28	40%	8	28%
Accessing support for mental health in the YOI	18	26%	2	7%
Suicide risk management strategy (Act & Care)	11	16%	1	3%
History of alcohol abuse	62	89%	17	59%
History of drug abuse	52	74%	14	48%
History of substance abuse	65	93%	18	62%
Accessing support for substance abuse while in the YOI	45	64%	13	45%
Previous convictions	53	76%	20	69%
Previous custodial sentences	32	46%	9	31%
Childhood offending behaviour (pre 16yrs)	39	56%	11	38%
Adversity: recorded on the prison system data base (PR2)	**Paws for Progress Participants**		**Intervention Control Group**	
	Frequency	Percentage	Frequency	Percentage
In care as a child	24	34%	6	21%
Trauma as a child	38	54%	14	48%
Childhood neglect or abuse	27	39%	11	38%
Significant bereavement(s)	19	27%	9	31%
Adversity group (one or more of above)	43	61%	19	66%

Convictions and Custodial Sentences

Paws for Progress: There were 38 (54.3%) participants who had not previously served a custodial sentence, while 15 (21.4%) had served one previous custodial

sentence, 11 participants (15.7%) had served two, 5 (7.1%) had served three and 1 (1.4%) had served five previous custodial sentences.

Intervention Control: There were 20 (69%) Intervention participants who had not previously served a custodial sentence, while 7 (24.1%) had served one previous custodial sentence, 1 participant (3.4%) had served two, and 1 participant (3.4%) had served three previous custodial sentences.

Table 4.5: Description of Participants' Convictions and Custodial Sentences

Convictions and Custodial Sentences	Paws for Progress Participants (N=70)			Intervention Control Group (N=29)		
	Mean	Std. Dev.	Median (min - max)	Mean	Std. Dev.	Median (min - max)
Time in prison (months) before beginning programme	7	6	6 (0-33)	11	7	8 (2-31)
Sentence Length (months)	39	34	28 (7-192)	46	23	36 (16-114)
Number of Index Offences	4	4	2 (1-19)	3	4	2 (1-20)
Number of Previous Custodial Sentences	1	1	0 (0-5)	0	1	0 (0-3)
Previous custodial sentences: Time served (months)	8	14	0 (0-77)	5	9	0 (0-28)
Total time in prison (previous and current sentences)	15	15	10 (0-83)	17	10	16 (5-40)
Number Previous Convictions	5	6	3 (0-29)	5	8	3 (0-40)

Index Offence (for which the participants' current sentence is being served)

Index offences were classified under the most serious index offence (e.g. one assault and one assault to severe injury and permanent impairment is classified as severe violence). If there are multiple non-violent offences, this is classified under most frequently occurring category (e.g. 3 theft and 1 vandalism are classed as Dishonest). If there are high numbers of non-violent offences which are not easily split by frequency (e.g. 3 theft, 2 breach and 3 traffic), this is classed as 'Multiple Non-Violent'.

Table 4.6: Index offence categories according to intervention group

Index Offence Categories		Paws for Progress Participants (N=70)		Intervention Control Group (N=29)	
		Frequency	Percent	Frequency	Percent
Threatening	Threatening/abusive behaviour, offensive weapon, racial abuse	1	1%	1	3%
Violence	Assault, assault to injury, police assault/resist arrest	30	43%	5	17%
Severe violence	Assault to severe injury, permanent disfigurement, permanent impairment	18	26%	4	14%
Life endangerment	Attempted murder, culpable homicide, murder	11	16%	8	28%
Dishonest	Theft, shoplifting, theft by housebreaking, conspiracy, theft of vehicle, reset	3	4%	3	10%
Drugs	All drug related offences	2	3%	6	21%
Traffic	Traffic related offences	1	1%	1	3%
Antisocial	Vandalism, breach of peace, malicious damage / mischief, reckless conduct	0	0%	0	0%
Breach	Bail breach, breach of community payback order, failure to attend dietary hearing, not appearing in court, breach of curfew	0	0%	0	0%
Recall	Recall to custody following license breach to serve extended / remaining sentence	1	1%	1	3%
Multiple non-violent	Multiple non-violent offenses (not including Violence, Severe Violence, Life Endangerment, Recall) with index offence unclear (i.e. >3 offenses in multiple categories)	3	4%	1	3%

The Paws for Progress and Intervention Control groups' frequencies of participants' index offences are shown in Table 4.6. A high percentage of Paws for Progress participants' index offences fall under the Violence and Severe Violence categories (69% of Paws for Progress participants, in comparison with 31% of Intervention Control participants). In contrast, the percentages of Paws for Progress participants with offences related to Life endangerment (16% compared to 28% of Intervention Control participants) and Drugs (3% compared to 21% of Intervention Control participants) were low.

Section 3b: Offending behaviour and custodial sentences: Paws for Progress / Intervention Control comparison

Particularly as participants were not randomly assigned between the Paws for Progress and Intervention Control Groups, demographic variables were compared at pre-test to assess for potential sampling bias. As these data were not normally distributed, Current Sentence Length and Time in Prison (before beginning the programme) were compared using Mann-Whitney U tests to assess group differences.

Current Sentence: Length (months)

The sentence length for Paws for Progress participants (Median = 28 months) was significantly lower than the Intervention Control participants (Median = 36 months), U = 691.50, z = -2.49, p=0.013.

Current Sentence: Time in Prison (before programme)

The time spent in the prison before beginning the programme was significantly lower for Paws for Progress participants (Median = 6 months) than Intervention Control participants (Median = 8 months), U = 606.00, z = -3.15, p=0.002.

Due to the group differences in sentence length and time in prison before the programme (likely confounds / sampling bias), this limited the comparisons which could be made directly between the Paws for Progress for Progress and Intervention Control Groups.

Section 3c: Engaging the Disengaged

Learning, Skills and Employability (LSE)

Paws for Progress: When beginning the programme, 40 participants (57%) had not previously engaged with any LSE classes, courses or learning support available through the Learning Centre at the YOI. There were 9 participants (13%) who had briefly engaged (i.e. had attended an activity for <1 week) and 16 (23%) had engaged only for a short time period (i.e. a few sessions). Only 5 participants (7%) had engaged with any of the activities available at the YOI for a longer time period (regular attendance for >3weeks / gained qualification or certificate).

Intervention Control Group: When beginning the programme, 9 participants (31%) had not engaged with any LSE classes, courses or learning support available through the Learning Centre the YOI. However, only 1 participant (3%) had briefly engaged (i.e. <1 week) and 5 (17%) had engaged only for a short time period (i.e. a few sessions). In contrast to Paws for Progress participants, 14 (48%) of the Intervention Control participants had engaged with the Learning Centre at the YOI for a longer time period (regular attendance for >3weeks / gained qualification or certificate).

Activities

Paws for Progress: At the time of beginning the programme, 18 participants (26%) had not engaged with any Activities available at the YOI. Activities include work parties, training courses and youth work / projects. There were 7 participants (10%) who had briefly engaged (i.e. <1 week) and 32 (46%) had engaged only for a short time period (i.e. a few sessions). Only 13 participants (19%) had engaged with any of the activities available at the YOI for a longer time period (regular attendance for >3weeks / gained qualification or certificate).

Intervention Control Group: At the time of beginning the programme, only 1 participant (3%) had not engaged with any Activities available at the YOI. There were 17 (59%) who had engaged in Activities for a short time period (i.e. a few sessions). There were 11 participants (38%) who had engaged with Activities for a longer time period (regular attendance for >3weeks / gained qualification or certificate).

Section 4: Evaluating the efficacy of the Paws for Progress Programme

Section 4a: Paws for Progress: Engagement

Programme Records

Paws for Progress: Programme Records indicate the high level of engagement of Paws for Progress participants. Attendance records indicated that the number of training sessions in which a single participant did not attend due to choice were extremely rare (<3 sessions per year), meaning the general rate of attendance was almost 100%.

Long term engagement

As shown in Table 4.7, the initial eight week course typically represented the beginning of engagement for Paws for Progress participants because over 90% of participants continued to engage with Paws for Progress after completing their initial course cycle.

Even after participants left the Young Offenders Institution, there were high levels of continued engagement with Paws for Progress and the support services provided, with over 70% of participants maintaining engagement. However, the primary constraint on post release support for Paws for Progress participants was the limited staff time available and so this figure is likely to considerably underestimate the potential demand for support following release.

Table 4.7: Long term engagement with Paws for Progress

Follow up after participation in Paws for Progress	Paws for Progress Participants (N=70)	
	Frequency	Percentage
Continued engagement with Paws for Progress after completion of the course (e.g. assisting / mentoring)	64	91%
Continued engagement with Paws for Progress after leaving the YOI (e.g. work experience placement)	50	71%

Section 4b: Institutional behaviour

Methods of Data Collection

Data were collected from PR2 to monitor the behaviour of participants, measured by recording Disciplinary Reports received by participants in the 3 months prior and the 3 month period after commencing the programme. This information was collected at least 6 months after participation.

Participants' Behaviour

Behaviour is measured by the number of Disciplinary Reports received in the 3 months prior and 3 months post beginning the course. There were 64 Paws for Progress participants for whom these data were available (91%, as 6 participants were not in custody for the minimum of >2 months pre required, N= 64). There were 29 participants in the Intervention Control group for whom these data were available (100%, N= 29).

Table 4.8: Disciplinary Reports: Categories (mutually exclusive)

Disobedience	Disobey rules, not present where meant to be etc.
Vandalism	Damages prison property, e.g. sets fire to property.
Unauthorised	Possession of unauthorised items/substance, smoking in unauthorised area, etc.
Violence / Threat	Violent / threatening behaviour, e.g. fighting, abusive/insulting behaviour.

Data analyses

Data were explored and analysed using IBM SPSS Statistics 19. The distribution was checked for normality, which could not be assumed for the disciplinary reports data. Non-parametric tests were therefore employed; Wilcoxon Signed Ranks test was used to compare the number of Disciplinary Reports received pre and post participating in the Intervention programmes.

Table 4.9: Disciplinary reports by category pre and post-participation in Paws for Progress and Intervention Control groups.

Disciplinary Reports	Time period (3mths)	Paws for Progress Participants (N=64)			Intervention Control Group (N=29)		
		Mean	Standard Deviation	Median (min – max)	Mean	Standard Deviation	Median (min – max)
Total Disciplinary Reports	(Pre)	1.64	2.18	1 (0-9)	0.31	0.81	0 (0-4)
	(Post)	0.64	1.03	0 (0-4)	0.69	0.93	0 (0-3)
'Unauthorised' Reports	(Pre)	0.20	0.48	0 (0-2)	0.00	0.00	0 (0)
	(Post)	0.13	0.38	0 (0-2)	0.10	0.41	0 (0-2)
'Violence / Threat' Reports	(Pre)	0.83	1.23	0 (0-5)	0.17	0.60	0 (0-3)
	(Post)	0.23	0.50	0 (0-2)	0.38	0.62	0 (0-2)
'Disobedience' Reports	(Pre)	0.41	1.00	0 (0-6)	0.10	0.31	0 (0-1)
	(Post)	0.19	0.47	0 (0-2)	0.14	0.44	0 (0-2)
'Vandalism' Reports	(Pre)	0.20	0.54	0 (0-3)	0.03	0.19	0 (0-1)
	(Post)	0.09	0.43	0 (0-3)	0.07	0.37	0 (0-2)

Disciplinary Reports: Results

Paws for Progress: There was a significant reduction in the Total number of Disciplinary Reports received by Paws for Progress participants when comparing the 3 months prior to beginning (Pre Median = 1) with the 3 months after beginning the programme (Post Median = 0), z = -4.62, p =0.001, r = -0.41.

For reports for 'Unauthorised' behaviour, there was no change pre and post participation (p = 0.17). For 'Disobedient' behaviour, there was a significant reduction in the number of reports received pre (Median = 0) and post (Median = 0) participation, z = -1.98, p =0.048; however the effect size was small (r = -0.17). For 'Vandalism' there was a significant reduction in the reports received pre (Median = 0) and post (Median = 0) participation, z = -2.33, p =0.020, r = -0.21.

When comparing 'Violent and Threatening' behaviour, there was a significant reduction in Disciplinary Reports received by Paws for Progress participants pre (Median=0) and post (Median = 0) participation, z = -4.08, p = 0.001, r = -0.36. The medium to large effect size here suggests that the reduction in 'Violent and Threatening' behaviour is largely responsible for the reduction in total number of Disciplinary Reports.

Intervention Control Group: There was a significant but small increase in the total number of Disciplinary Reports received by participants when comparing the 3 months prior to beginning (Pre Median=0) with the 3 months after beginning the programme (Post Median = 0), z = -2.02, p = 0.043, r = -0.27. When comparing the number of reports received for 'Unauthorised', 'Disobedient', 'Vandalism' and 'Violent and Threatening' behaviour, there were no significant changes pre and post-participation (p = 0.18 – 0.66).

Section 4c: Psychometrics / Questionnaires

Three measures were completed pre and post participation in the Paws for Progress and Intervention Control groups, and over a comparable time period for the Waiting List Control group. The BarOn Emotional Quotient Inventory: Short (BarOn EQi:S) and Assessment of Needs (AoN) measures were piloted and refined prior to use; this process is described in Chapter 3 (Development of Methodologies; Section 4).

<u>Methods of data collection</u>

Following Information / Introductory session discussions and completion of Consent forms, participants were asked to complete a series of psychometric assessments. The confidentiality of assessments was explained to participants; it was also emphasised that completion of the assessments bore no relation to their position on the Intervention programme. Completion of assessments was voluntary; no penalties would be incurred if assessments were not completed. The assessments would be used only to assess the groups' progress over the Intervention period (or a comparable time period) by comparing pre and post scores. The three assessments were completed in the group context; groups were asked to respect the privacy of others and focus on completing their own assessments. Participants were encouraged to ask for guidance if the language was not clear or there were any barriers to the successful completion of the assessment.

Waiting List Control: Participants on the waiting list to begin the Paws for Progress course completed the EQi:S, AoN and Rosenberg Self-esteem scale approximately 6-8 weeks prior to the induction period for a new course cycle (pre-test). These assessments were then repeated during the preparations for the induction period (post-test waiting list, which also served as a pre-test for the course cycle that the participant joined).

<u>Measures</u>

BarOn EQi:S: The EQi:S has a five point Likert scale for responses for each of the 52 items (see Appendix 1). Participants are asked to choose the response that seems best at that time. However, if participants do not know the meaning of a word or understand a statement, they are encouraged to ask questions. Participants are

reminded that there are no "right" or "wrong" answers and no "good" or "bad" choices, and are asked to answer openly and honestly by indicating **how you actually are** and **not** how you would like to be or would like to be seen. There is no time limit for completion, but participants are encouraged to focus carefully and ensure they consider and respond to every statement.

Assessment of Needs (AoN): The AoN is a 20 item questionnaire completed pre and post participation (see Appendix 2). The instructions ask participants to imagine they have started a new job, and do not know anyone who works there, and to answer each question to best describe how they would feel about social interactions in that context. Responses are made on a 5 point Likert scale.

Rosenberg Self-esteem Scale: There are 10 items on the scale, comprising a list of statements dealing with the participants' general feelings about themselves. Responses are made on a 4 point scale, choices of response to each statement range from 1- Strongly Agree; 2– Agree; 3- Disagree and 4- Strongly Disagree.

Psychometrics / Questionnaires: Participants

Paws for Progress: From 70 participants who completed Cycles 1-12, 58 participants completed the psychometric measures (Cycles 3-12, N=58). The remaining 12 completed the programme during the Pilot Phase, and therefore did not complete the measures in the revised format (see sections 3 and 4 in Chapter 3).

Intervention Control Group: There were 31 participants from 4 cycles of the Intervention with pre and post measures. Of these, 2 participants also completed Paws for Progress and were removed. Therefore, 29 participants who completed the Intervention contributed data to the following analyses (N=29).

Waiting List Control: There were 31 participants who completed assessments pre and post as a Waiting list Control Group, who then went on to complete the Paws for Progress course (72%) and 12 participants who completed pre and post who did not attend Paws for Progress during the evaluation period (28%). In total, 43 participants contributed data as the Waiting List Control Group (N=43).

BarOn EQi:S

Paws for Progress: From 58 participants (Cycles 3-12), there were 52 participants with complete pre and post assessments for the EQi:S (Missing data / incomplete Pre = 2; Missing data / incomplete Post = 4; N=52). Scores of 12 or above on the EQi:S Inconsistency Index invalidates the results on this measure. There were 14 participants (27%) with a pre score of 12 or over, and 13 participants (25%) with a post Score of 12 or over. In total, there were 27 scores of 12 and over on the Inconsistency Index, which compromised the results of 21 participants (6 had inconsistent responses both pre and post). When these 21 participants (40%) with scores of 12 or over were removed from the dataset, there were 31 participants remaining (60%).

There were an additional 17 participants removed due to scores of 4 or below for Q52 (i.e. sometimes responded openly and honestly) on the EQi:S, leaving 14 participants. One participant's data were removed on his request (invalid due to favourable impression on pre-test). Once the participants with invalid results according to the Inconsistency Index and Q52 (answering honestly) were removed, there were 13 participants remaining with valid results for analyses (N= 13, of 52) which represents only 25% of the participants.

Intervention Control Group: From 29 participants, there were 28 with complete pre and post assessments for the EQi:S. When 6 participants with invalid results according to the Inconsistency Index (score of 12 or over) were removed from the dataset, there were 22 participants remaining (76%). Once the participants with invalid results according to Q52 (answering honestly) were removed, there were 13 participants remaining with valid results for analyses (N= 13/29 = 45%).

Waiting List Control: From the 43 participants in the Waiting List Control group, there were 42 with complete pre and post assessments for the EQi:S (including 30 participants who went on to complete the Paws for Progress course). When participants with invalid results according to the Inconsistency Index (score of 12 or over) were removed, there were 24 participants remaining (57%). Once participants with invalid results according to Q52 (answering honestly) were removed, there were 13 participants remaining with valid results for analyses (31%). Of these 13 participants, 5 did not subsequently attend and 8 did attend Paws for Progress.

Data analyses

The distribution of the scales and total scores on the BarOn EQi:S were checked for normality, and the assumptions of parametric tests were satisfied. Paired sample T-tests were used to compare EQi:S scores pre and post-participation.

BarOn EQi:S: Results

Paws for Progress: As shown in Table 4.10, there were no significant changes in the Total EQi:S scores pre (Mean = 26) and post (Mean = 27) participation in Paws for Progress, t (12) = -0.45, p = 0.66. This was also the case for the Intra-personal, Stress Management, Adaptability and the General Mood Scales (p > 0.05). There was however a significant increase in the Inter-personal Scale, pre (Mean = 33) to post (Mean = 37) participation, t (12) = -3.78, p=0.003.

Intervention Control Group: There were no significant changes in the Total EQ scores, or the Intra-personal, Inter-personal, Adaptability and General Mood Scales pre and post-participation in the Intervention (p > 0.05). There was however a significant decrease in the Stress Management Scale, pre (Mean = 23) to post (Mean = 19) participation, t (12) = 3.32, p = 0.006.

Waiting List Control: As shown in Table 4.10, the mean EQi:S scores for the Waiting List Control Group were very similar at the pre and post time points (comparable period of time to the Intervention groups). There were no significant changes in the Total EQ scores or any of the scales (p > 0.05).

Table 4.10: BarOn EQi:S: Results overall and for each subscale for pre and post-participation according to group (bold text highlights significant results)

EQi:S Categories Pre and Post Participation		Paws for Progress Participants (N=13)			Intervention Control (N=13)			Waiting List Control (N=13)		
		Mean (SD)	t	P	Mean (SD)	t	P	Mean (SD)	t	P
Intra-personal Scale	Pre	24 (4)	0.98	0.35	24 (7)	1.59	0.13	23 (6)	-0.76	0.46
	Post	22 (5)			21(8)			24 (4)		
Inter-personal Scale	Pre	33 (3)	-3.78	**<0.01**	34 (6)	-1.82	0.09	36 (5)	-0.14	0.89
	Post	37 (4)			36 (5)			36 (5)		
Stress Management Scale	Pre	22 (4)	1.18	0.26	23 (8)	3.32	**<0.01**	19 (6)	0.73	0.48
	Post	20 (5)			19 (8)			19 (5)		
Adaptability Scale	Pre	22 (3)	-0.45	0.66	20 (6)	-2.15	0.05	24 (3)	0.84	0.42
	Post	22 (6)			23 (7)			23 (5)		
General Mood Scale	Pre	31 (2)	-0.63	0.54	30 (3)	-1.26	0.23	32 (5)	0.44	0.67
	Post	32 (3)			31 (3)			31 (4)		
Total EQ	Pre Total	26 (2)	-0.45	0.66	26 (2)	-0.62	0.55	27 (2)	0.22	0.83
	Post Total	27 (1)			26 (2)			27 (2)		
Positive Impression Scale	Pre	10 (3)	1.04	0.32	10 (3)	1.56	0.14	12 (5)	0.64	0.53
	Post	9 (3)			9 (3)			11 (3)		

Assessment of Needs

Paws for Progress: From 58 participants (Cycles 3-12), there were 52 with complete pre and post assessments for the Assessment of Needs (AoN). The total scores on the AoN at pre-test were then examined, to determine if there was a ceiling effect on pre-test, which would suggest students favoured a positive impression in their pre-test assessments. A ceiling effect would be observed if participants consistently scored 4 ('I would find this very easy') throughout the 20 items on the assessment, leading to scores of 76 or above (out of a possible total of 80). There were 7 participants (13.5%) with a total score over 76, whose data were removed. In addition, one participant's data were removed on his request (invalid due to favourable impression on pre-test). Therefore, there were 45/52 participants remaining whose data contributed to the following analyses (N=45).

Intervention Control Group: The first Cycle of the Intervention Control did not complete the AoN. There were a further 4 participants with missing data at pre/post-test, leaving 18 participants (N=18). The total scores on the AoN at pre-test were then examined, to determine if there was a ceiling effect on pre-test (scores of 76 or above). In contrast with the Paws for Progress group, there were no scores at ceiling at pre-test in the Intervention Control Group. Therefore, 18 participants' data contributed to the following analyses (N=18).

Waiting List Control: From 43 participants, there were 42 participants with complete pre and post-test AoN (30 of whom attended Paws for Progress). There was a ceiling effect on pre-test (score of 76 or above out of 80) identified for 4 participants (10%), whose data were removed. There were therefore 38/42 remaining whose AoN data contributed to the following analyses (28 of whom attended Paws for Progress).

Data analyses

The distribution was checked for normality, which could not be assumed for the AoN data. Non-parametric tests were therefore employed; Wilcoxon Signed Ranks test was used to compare the AoN scores pre and post-participation.

Assessment of Needs: Results

Paws for Progress: As shown in Table 4.11, there was a significant but small increase in Total AoN scores pre (Median = 57) and post (Median = 59) participation in Paws for Progress, z = -2.31, p = 0.02. This was also the case for 8 individual items on the AoN with significant increases in participants' perceived abilities ($p < 0.05$): 'Making Friends', 'Talking to people', 'Working alongside people your own age', 'Meeting strangers each day', 'Giving instructions', 'Getting to know people', 'Disagreeing with others' and 'Working in a team'.

Intervention Control Group: There were no significant changes in Total AoN scores pre and post-participation ($p > 0.05$, see Table 4.12). There was however a significant increase in 2 individual items on the AoN pre to post-participation: 'Making Friends' (p =0.01) and 'Talking to people', (p = 0.007).

Waiting List Control: There were no significant changes in the Total AoN scores at pre and post time points (comparable time period to Intervention groups). There were no significant changes in 19/20 of the individual items ($p > 0.05$, see Table 4.13). There was however a significant decrease in participants perceived ability to 'Follow instructions', from pre to post (p = 0.013). In contrast to the positive trends and significant increases for the Paws for Progress group, for the Waiting List Control group 17/20 individual items and the total score where the ranking of the data indicates Post AoN is reduced compared to Pre AoN.

Table 4.11: Paws for Progress Participants: AoN Questionnaire: Comparison of medians pre and post-participation using Wilcoxon Signed Ranks test (N=45). Shaded rows indicate significant change between pre and post scores.

	Item	Median pre (range)	Median post (range)	Z value	Sig (two tailed)
1.	Asking questions	3 (1 - 4)	3 (1 - 4)	-1.68	0.09
2.	Going into a room full of people	3 (1 - 4)	3 (1 - 4)	-0.51	0.61
3.	Making friends	3 (1 - 4)	3 (2 – 4)	-2.48	**0.01**
4.	Talking to people	3 (1 - 4)	3 (2 – 4)	-2.56	**0.01**
5.	Working alongside people your own age	3 (1 - 4)	4 (2 – 4)	-2.83	**0.01**
6.	Following instructions	3 (1 - 4)	3 (1 - 4)	-0.60	0.55
7.	Meeting strangers each day (e.g. customers)	3 (1 - 4)	3 (2 – 4)	-1.97	**<0.05**
8.	Mixing with different people	3 (1 - 4)	3 (2 – 4)	-1.70	0.09
9.	Making decisions affecting others	2 (1 - 4)	3 (1 - 4)	-1.40	0.16
10.	Giving instructions	2 (0 - 4)	3 (1 – 4)	-2.53	**0.01**
11.	Getting to know people	3 (1 - 4)	3 (2 – 4)	-2.20	**0.03**
12.	Keeping a conversation going	3 (1 - 4)	3 (1 - 4)	-0.94	0.34
13.	Holding eye contact	3 (1 - 4)	3 (1 - 4)	-1.64	0.10
14.	Disagreeing with others	3 (1 - 4)	3 (1 - 4)	-2.43	**0.01**
15.	Expressing opinions	3 (1 - 4)	3 (2 – 4)	-1.80	0.07
16.	People being too close	2 (0 - 4)	3 (1 - 4)	-1.47	0.14
17.	Talking about yourself	2 (1 - 4)	3 (1 - 4)	-1.76	0.08
18.	Talking in front of lots of people	2 (1 - 4)	2 (1 - 4)	-1.59	0.11
19.	People looking at you	2 (0 - 4)	3 (1 - 4)	-1.08	0.28
20.	Working in a team	3 (1 - 4)	4 (2 – 4)	-2.45	**0.01**
	Total AoN Score	57 (20-71)	59 (37-79)	-2.31	**0.02**

Table 4.12: Intervention Participants: AoN Questionnaire: Comparison of medians pre and post-participation using Wilcoxon Signed Ranks test (N=18). Shaded rows indicate significant change between pre and post scores.

	Item	Median pre (range)	Median post (range)	Z value	Sig (two tailed)
1.	Asking questions	3 (1 - 4)	3 (2 - 4)	-1.16	0.25
2.	Going into a room full of people	3 (1 - 4)	3 (1 - 4)	-1.73	0.08
3.	Making friends	3 (1 - 4)	3 (2 – 4)	-2.53	**0.01**
4.	Talking to people	3 (1 - 4)	4 (2 – 4)	-2.71	**<0.01**
5.	Working alongside people your own age	3 (2 - 4)	4 (2 – 4)	-1.00	0.32
6.	Following instructions	3 (0 - 4)	3 (2 - 4)	-0.54	0.59
7.	Meeting strangers each day (e.g. customers)	2 (1 - 4)	3 (1 – 4)	-1.03	0.31
8.	Mixing with different people	3 (1 - 4)	3 (0 – 4)	-0.30	0.76
9.	Making decisions affecting others	2 (1 - 4)	3 (1 - 4)	-1.65	0.10
10.	Giving instructions	3 (1 - 4)	3 (2 – 4)	-1.51	0.13
11.	Getting to know people	3 (2 - 4)	3 (2 – 4)	-0.58	0.56
12.	Keeping a conversation going	3 (1 - 4)	3 (2 - 4)	-1.07	0.29
13.	Holding eye contact	3 (0 - 4)	3 (0 - 4)	-0.63	0.53
14.	Disagreeing with others	3 (2 - 4)	3 (2 - 4)	-0.26	0.80
15.	Expressing opinions	3 (1 - 4)	3 (1 – 4)	-1.27	0.21
16.	People being too close	2 (1 - 4)	3 (1 - 4)	-0.91	0.37
17.	Talking about yourself	2 (1 - 4)	3 (1 - 4)	-1.07	0.28
18.	Talking in front of lots of people	2 (0 - 4)	3 (0 - 4)	-1.89	0.06
19.	People looking at you	3 (1 - 4)	3 (1 - 4)	-0.58	0.56
20.	Working in a team	3 (2 - 4)	4 (2 – 4)	-0.91	0.37
	Total AoN Score	56 (30-74)	60 (37-75)	-1.29	0.20

Table 4.13: Waiting List Control Group AoN Questionnaire: Comparison of medians pre and post-participation using Wilcoxon Signed Ranks test (N=38). Shaded rows indicate significant change between pre and post scores.

	Item	Median pre (range)	Median post (range)	Z value	Sig (two tailed)
1.	Asking questions	3 (1 - 4)	3 (1 - 4)	-1.63	0.10
2.	Going into a room full of people	3 (0 - 4)	3 (1 - 4)	-0.08	0.93
3.	Making friends	3 (1 - 4)	3 (1 − 4)	-0.39	0.70
4.	Talking to people	3 (1 - 4)	3 (1 − 4)	-0.97	0.33
5.	Working alongside people your own age	3 (2 - 4)	4 (1 − 4)	-1.71	0.09
6.	Following instructions	3 (2 - 4)	3 (1 - 4)	-2.48	**0.01**
7.	Meeting strangers each day (e.g. customers)	3 (1 - 4)	3 (1 − 4)	-1.58	0.12
8.	Mixing with different people	3 (2 - 4)	3 (1 − 4)	-1.30	0. 19
9.	Making decisions affecting others	2 (0 - 4)	2 (1 - 4)	-1.00	0.32
10.	Giving instructions	3 (0 - 4)	3 (1 − 4)	-0.33	0.74
11.	Getting to know people	3 (2 - 4)	3 (1 − 4)	-0.23	0.82
12.	Keeping a conversation going	3 (1 - 4)	3 (1 - 4)	-0.78	0.44
13.	Holding eye contact	3 (1 - 4)	3 (1 - 4)	-0.39	0.70
14.	Disagreeing with others	3 (1 - 4)	3 (1 - 4)	-0.73	0.46
15.	Expressing opinions	3 (2 - 4)	3 (1 − 4)	-0.76	0.45
16.	People being too close	3 (0 - 4)	2 (1 - 4)	-0.47	0.64
17.	Talking about yourself	2 (0 - 4)	2 (1 - 4)	-0.99	0.32
18.	Talking in front of lots of people	3 (0 - 4)	3 (0 - 4)	-0.22	0.83
19.	People looking at you	3 (1 - 4)	3 (1 - 4)	-1.31	0.19
20.	Working in a team	3 (2 - 4)	3 (1 − 4)	-0.92	0.36
	Total AoN Score	60 (26-75)	57 (20-80)	-0.73	0.46

Rosenberg Self-esteem

Paws for Progress: From 58 participants (Cycles 3-12), there were 47 with complete pre and post assessments for the Rosenberg Self-esteem measure. One participant's data were removed on his request (invalid due to favourable impression on pre-test). The total Rosenberg Self-esteem scores were then examined, to determine if there was a ceiling effect on pre-test, which would suggest other students' responses had also been biased towards a positive impression in their pre-test assessments. A ceiling effect would be observed if participants consistently scored very positively throughout the 10 items, leading to scores of 28 or above (out of a possible maximum of 30). Including the student described above, there were 6 participants (13%) with a total score over 28, whose data were removed. Therefore, there were 41/47 participants remaining whose data contributed to the following analyses (N=41).

Intervention Control Group: There were 7 of the 29 participants in the Intervention Control Group who did not complete the Rosenberg Self-esteem measure (those on Cycle 1). A further 4 participants were missing data at pre/post-test, leaving 18 participants (N=18). In contrast with Paws for Progress, only one participant (6%) was at ceiling at pre-test in the Intervention Control Group, whose data were removed. Therefore, 17 participants' data contributed to the following analyses (N=17).

Waiting List Control: From 43 participants, 37 participants completed pre and post-test Rosenberg Self-esteem. There was a ceiling effect on pre-test (score of 28 or above out of 30) identified for 3 participants (8%), whose data was removed. Therefore 34/37 participants' data contributed to the following analyses (N=34).

Data analyses

The distribution of total scores on the Rosenberg Self-esteem measures were checked for normality, and the assumptions of parametric tests were satisfied. Paired sample T-tests were used to compare the scores pre and post-participation.

Rosenberg Self-esteem: Results

Paws for Progress (N=41): There was no significant difference between Rosenberg Self-esteem scores at pre-test (Mean = 20, *SD* = 3) and post-test (Mean = 21, *SD* = 5), t (40)=-1.13, *p* =0.26. As the scores appeared very similar between pre and post-test, the relationship between the scores was examined. Scores at pre-test were positively related to scores at post-test, *r* = 0.46, *p* = 0.003.

Figure 4.2: Paws for Progress Participants: Relationship between scores on Rosenberg Self-esteem scale pre and post-test (N=41)
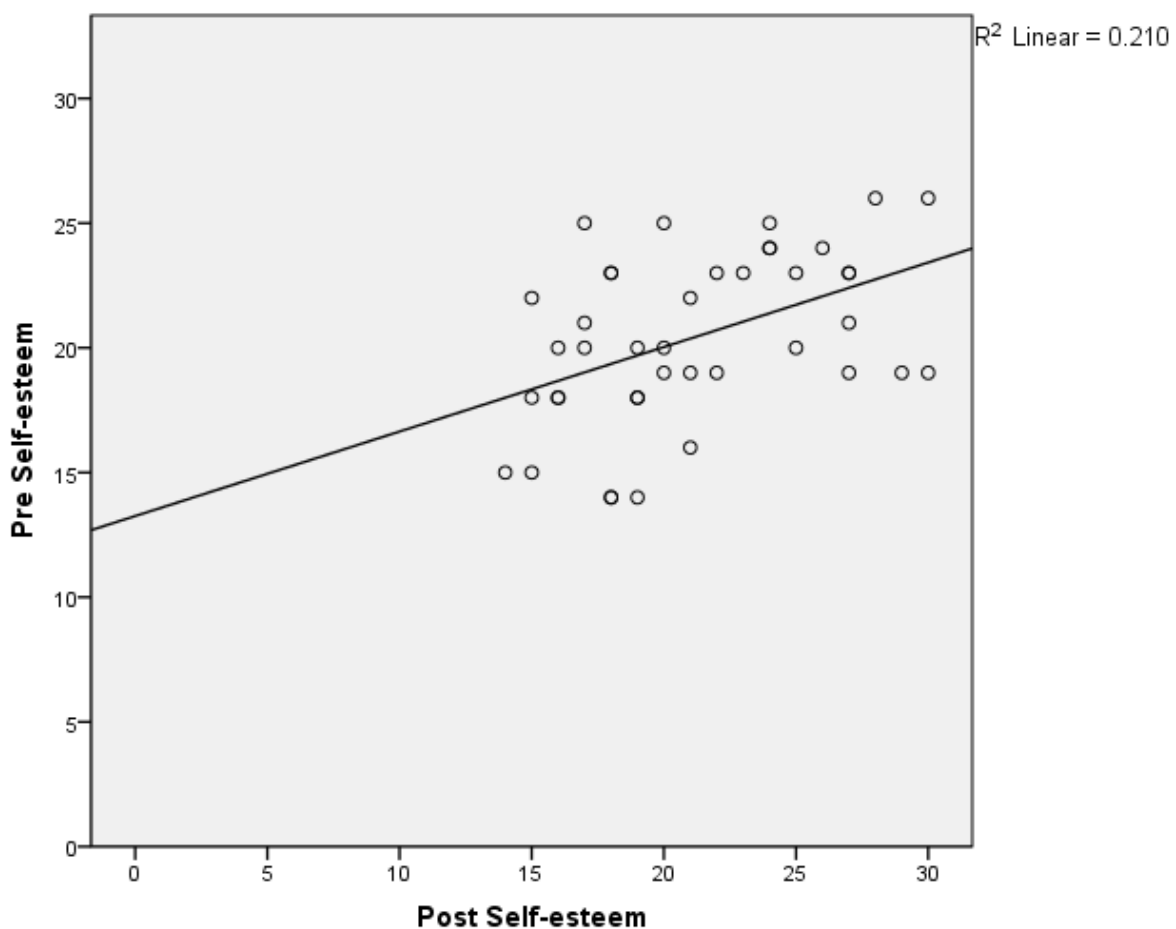
Intervention Control Group: There was no significant difference between Rosenberg Self-esteem scores at pre test (Mean = 21, *SD* = 3) and post test (Mean = 22, *SD* = 4), t (16) = -1.40, *p* = 0.18. As with the Paws for Progress participants, there was again a significant positive correlation between Self-esteem scores at pre and post-test, *r* = 0.67, *p* = 0.003.

Figure 4.3: Intervention Control Participants: Relationship between scores on Rosenberg Self-esteem scale pre and post-test (N=18)
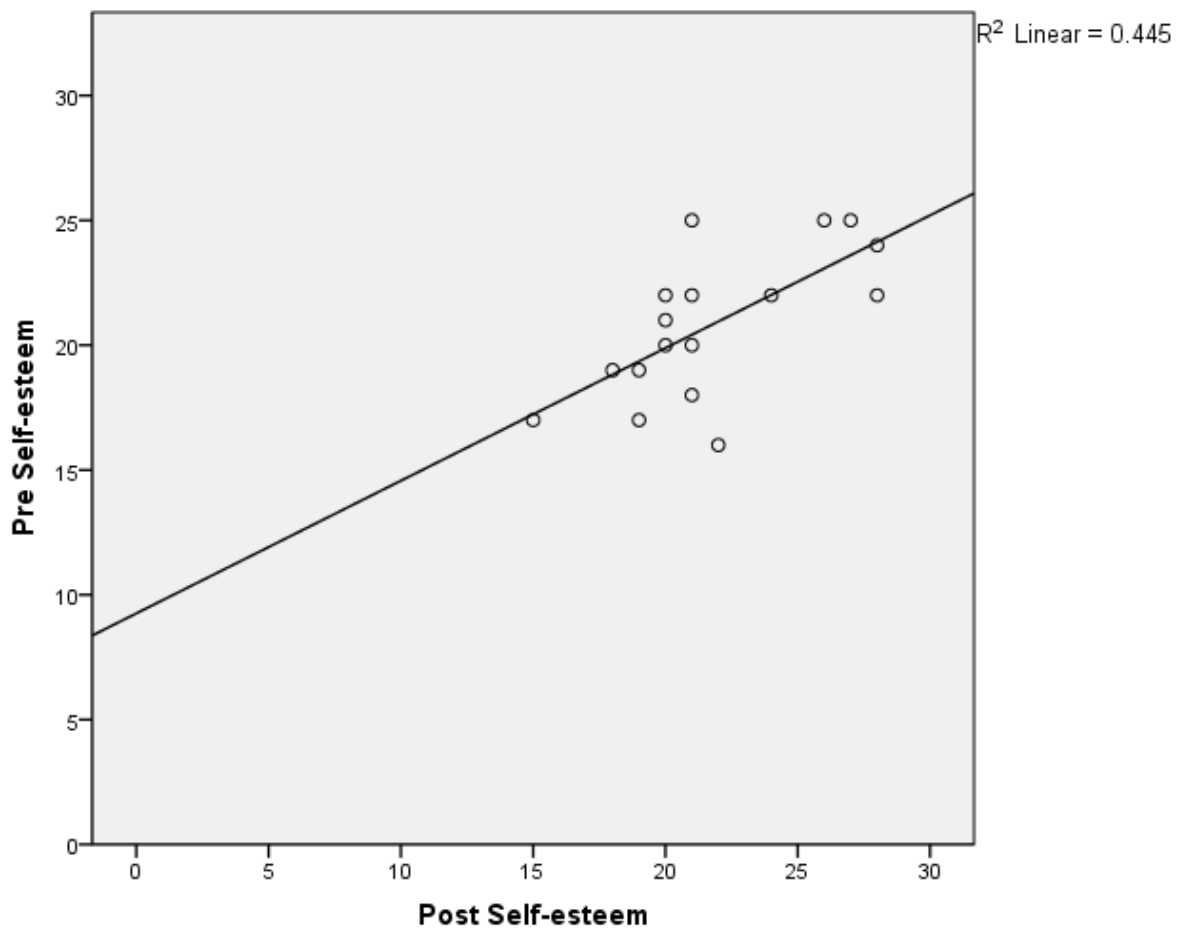
Waiting List Control: There was not a significant difference between Rosenberg Self-esteem scores at pre-test (Mean = 22, *SD* = 4) and post-test (Mean = 22, *SD* = 4), t (33) = -0.03, p = 0.98. In line with previous groups, there was a significant positive correlation between scores at pre and post-test, r = 0.70, p = 0.001.

Figure 4.4: Waiting List Control Participants: Relationship between scores on Rosenberg Self-esteem scale pre and post-test (N=34)
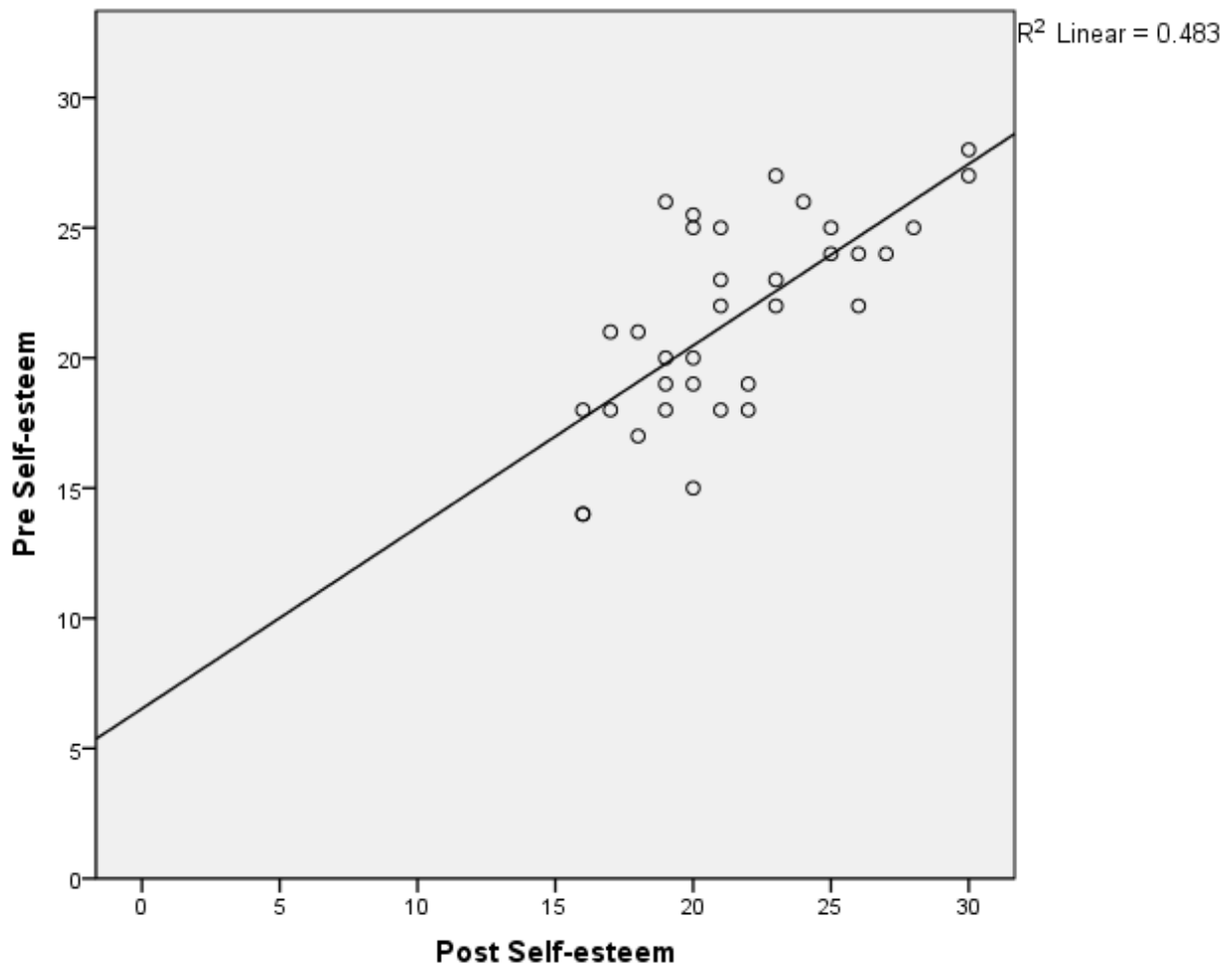
Section 4d: Education

Written assessments: Fulfilling dogs' needs

During the pilot phase, students were asked to complete a written communication assessment towards the end of the second course cycle, which listed 3 questions related to fulfilling dogs' needs. This was not in use as a pre /post-test measure at this stage; instead it was simply a piece of written coursework, which was optional / voluntary. The response of students inspired the development of a written assessment as a measure; the high quality and quantity of written communications, and eagerness to demonstrate knowledge and understanding demonstrated by students and peer mentors exceeded expectations. It was clear that the students' attitude towards learning and confidence in their communication abilities had changed through their participation on the Paws for Progress course, as had the depth of their understanding of dogs.

This written assessment was therefore included as a pre and post measure from Cycles 3-12. Three questions were included:

What does a dog need?

1. Please write about what you think a dog needs, so that both the dog and the owner are happy and content.
2. What do you think can go wrong if a dog does not get what he/she needs?
3. What would your advice be for 'first time' dog owners?

The purpose was to examine changes pre and post participation in the programme, which may suggest changes in confidence and motivation to complete written assignments, in communication abilities, and in the participants' attitudes to animal welfare, in their knowledge and understanding of dogs.

Methods of data collection

From Cycle 3 –12, written assessments were administered pre and post-participation in the Paws for Progress course. In the first training session of the course (before induction training began) new students were asked if they would like to complete a short written task about dogs' needs. The purpose of the assessments was explained; it was also emphasised that completion of assessments bore no relation to their

position on the programme. Completion of the assessment was voluntary; no penalties would be incurred if not completed. It was emphasised that participants could answer as many or few of the questions as they chose. The assessments would be used to assess whether the participants' knowledge and understanding changed over the Intervention period by comparing pre and post assessments.

Written assessments were completed in the group context; groups were asked to respect the others' privacy and focus on completing their own assessments. Participants were encouraged to ask for assistance if there were any barriers to the successful completion of the assessment; this included requesting a scribe to write as they dictated, but did not include assistance with the content of the answers. Participants were asked to work independently, so their individual understanding could be assessed. This process was repeated (according to the same instructions) in the week following the students' completion of the course (approx. 9 weeks later) in which voluntary nature of the task was equally emphasised. The completed assessments then served as a post-test measure, in a repeated measure design.

Data analysis

Written assessments were scanned into PDF files and imported into NVIVO to be transcribed for analyses. Word counts were then completed using the NVIVO software. The number of valid points in the manuscripts were counted and recorded; each valid point was a discreet statement within the answers provided. Repeated content was not included in the total for valid points. The quality of grammar was also measured, against the Scottish Qualification Authority (SQA) framework for written communication skills which provide guidelines and requirements for the Core Skills in Communication. The levels identified for participants' assessments ranged from Level 2 to Level 4. At Level 2, the requirements include a short written communication (such as a short list) using very simple vocabulary and whilst errors may be present, these should not prevent the reader from grasping the meaning after further reading. In contrast, at Level 4, the requirements include producing a written communication which conveys several sets of information, organising the sets of information/aspects of content into a logical structure, and using spelling, vocabulary, and sentence structure accurately enough to convey meaning at first reading.

Word count, number of valid points, and grammar quality were explored and analysed using IBM SPSS Statistics 19. The distributions were checked for normality, which could not be assumed for word count or grammar quality scores. Non-parametric tests were therefore employed; Wilcoxon Signed Ranks tests were used to compare the scores pre and post-participation in the Paws for Progress course.

Paws for Progress: From 58 participants (Cycles 3-12), there were 6 with missing post-test assessments due to operational constraints (e.g. missing during sessions in which assessments were completed, due to moves to adult establishments, pending release etc.). There were no refusals to complete post-test assessments. Therefore 52 participants' data contributed to the first analyses (N=52).

There were, however, 5/52 students (9.6%) who chose not to complete any of the questions in the pre-test, but chose to complete post-test assessments. These students' data were included in the initial analyses (as scores of zero at pre-test) as these were actual scores for the measure. However, to determine whether extreme scores of zero were biasing overall results and amplifying large effect sizes, the data of these students were then removed and the analyses repeated (N= 47).

Results: Written Assessment: Fulfilling dogs' needs

The total word count increased significantly, almost trebling from pre (Median = 33) to post-test (Median = 92) on the written assessments (N=52), z = -6.27, p =0.001, r = -0.87. The number of valid points (knowledge demonstrated) increased significantly, almost doubling from pre (Median = 10) to post-test (Median = 18) on the written assessments, z = -5.99, p = 0.001, r = -0.83.

The quality of grammar also improved significantly from pre (Median = 2) to post-test (Median = 3) on the written assessments, z = -5.69, p =0.001, r = -0.79.

The data of participants with low scores of zero at pre-test were then removed and the analyses were repeated (N=47); all results remained significant. Removal of low scores at pre-test had very little impact on results, with similarly large effect sizes consistent throughout the three measures. Specifically, word count increased significantly from pre (Median = 36) to post-test (Median = 95), z = -5.96, p = 0.001, r = -0.87. Number of valid points increased significantly from pre (Median = 10) to

post-test (Median = 17), z = -5.64, p = 0.001, r = -0.82. Grammar quality improved significantly from pre (Median = 2) to post-test (Median = 3), z = -5.57, p =0.001, r =-0.81. Overall, both quality and quantity of written assessments was considerably enhanced by participation in Paws for Progress. Overall word count and knowledge content increased and there was a significant improvement in grammar quality from pre to post. In the pre-condition students tended to write in list forms and use a lot of colloquial language. In the post-condition students generally wrote in full sentences, structuring their answers and using more formal language.

Education: Qualifications

Due to changing numbers of qualifications available, qualifications gained by Paws for Progress students are described according to 3 different stages of development and operation.

Pilot Phase

During Cycles 1 and 2 (Aug 2011-December 2011), there were 12 participants (N=12). Of these, 6 participants (50%) had no previous qualifications, 2 participants (16.7%) had less than 3 previous qualifications, 3 participants (25%) had 3-5 previous qualifications, and one participant (8.3%) had 6-10 previous qualifications.

Originally, there was one qualification available during the pilot phase; the SQA unit in Personal Development: Self Awareness which was set at Level 4 (Intermediate 1). All participants (100%) successfully gained this qualification; for half of the students, this was the first qualification they had gained.

Following the development of the partnership between Paws for Progress and Fife College (the learning providers at the YOI) in early 2012, the majority of these participants went on to gain additional Core Skills qualifications in Communications. Initially, this was in response to the quality and quantity of written work (including promotional materials for the dogs, training plans and essays about welfare and training) produced by students, which was used in part to evidence their attainment in written Communications. Five students left the programme (released or moved to adult prison) prior to the introduction of additional qualifications, while seven students gained further qualifications.

All seven continuing students gained 4 SQA qualifications in Communications at Level 3 (Access): Reading, Writing, Speaking and Listening. Five students also gained an SQA qualification in Communications at Level 4 (Intermediate 1); this is particularly impressive given that three of these students, who had no previous qualifications, also went on to engage further with education after completing the programme (at adult establishments), gaining even more qualifications.

One of these students continued on the programme in the longer term (>1yr), and therefore also went on to complete 3 SQA qualifications in Numeracy at Level 3 (Access): Calculation, Graphical Information and Measuring, and the SQA qualification in ICT at Level 4 (Intermediate 1). This student therefore gained a total of 7 SQA qualifications at Level 3 (Access) and 3 SQA qualifications at Level 4 (Intermediate 1), having begun with less than 3 previous qualifications.

Cycles 3-5

During Cycles 3-5 of Paws for Progress (February to November 2012), 18 participants completed the programme. Of these, 9 participants (50%) had no previous qualifications, 2 participants (11.1%) had less than 3 qualifications, 3 participants (16.7%) had 3-5 qualifications, 3 participants (16.7%) had 6-10 previous qualifications and one participant (5.6%) had missing data (qualifications indicated but unclear).

During this period, the SQA unit in Personal Development (Level 4 /Intermediate 1) was available. All participants (100%) successfully gained this qualification; for half of the students, this was the first qualification they had gained.

The 4 SQA qualifications in Communications at Level 3 (Access): Reading, Writing, Speaking and Listening were also available. There were 17/ 18 students (94.4%) that gained all four units, while one student gained 3 of the 4 units. Four students (22.2%) continued on the programme in the longer term as peer mentors and went on to gain an SQA qualification in Communications at Level 4 (Intermediate 1).

The SQA qualification in ICT at Level 4 (Intermediate 1) was introduced during cycle 5, and all six students gained this qualification, along with two peer mentors. Five students continued beyond Cycle 5, and therefore also went on to complete 3 SQA

qualifications in Numeracy at Level 3 (Access): Calculation, Graphical Information and Measuring, when these became available from Cycle 6.

Therefore, all students gained a total of 3-7 SQA qualifications at Level 3 (Access) and 1-3 SQA qualifications at Level 4 (Intermediate 1). Given the low levels of qualification prior to beginning the programme, with 50% of students having no previous qualifications and 78% of students having 5 or less previous qualifications, this is particularly impressive.

Cycles 6 – 12

Forty participants completed cycles 6-12 of the Paws for Progress Intervention. Of these, 18 participants (45%) had no previous qualifications, 10 (25%) had less than 3 previous qualifications, 4 (10%) had 3-5 previous qualifications, 6 (15%) had 6-10 previous qualifications, one participant (2.5%) had 11-15 previous qualifications and one participant (2.5%) had missing data (qualifications indicated but unclear).

During this period, the SQA qualifications in Personal Development and ICT at Level 4 (Intermediate 1) were available. All 40 students (100%) successfully gained these qualifications.

The 4 SQA qualifications in Communications at Level 3 (Access): Reading, Writing, Speaking and Listening were all gained by 38 students (95%) over this period. One student gained 3 of the 4 units. One student had recently completed these units (due to the introduction of core skills units to the Joinery Workshop) and so instead completed Communications at Level 4. Two other students who continued as peer mentors also gained the SQA qualification in Communications at Level 4 (Intermediate 1), and two mentors progressed onto Level 5 (Intermediate 2) Communications.

The 3 SQA qualifications in Numeracy at Level 3 (Access): Calculation, Graphical Information and Measuring, were available throughout this period; 39 students (97.5%) gained all 3 of these qualifications. One student (2.5%) gained 2 of the 3 units. In addition, one student progressed to complete Numeracy at Level 4 whilst participating in the course.

Therefore, 100% of students gained SQA qualifications at Level 3 (Access) and SQA qualifications at Level 4 (Intermediate 1). Core Skills SQA qualifications in Communications, Numeracy and ICT were gained by all students, as was the SQA qualification in Personal Development. For 45% of students, these were the first qualifications they had gained, and 80% of students began by having 5 or less previous qualifications, and gained as many as 10 qualifications through their participation in the course.

Figure 4.5: Summary of educational aspects engaged with and educational attainment on the Paws for Progress course (N=70)

Male young offenders, age 16-21, serving custodial sentences at HM YOI Polmont (N= 70)

Learning aim: To engage young offenders in education, improve employability skills and enhance confidence in abilities

Voluntary Participation. Only 7% have previously maintained engagement with the Learning Centre; 57% have not engaged at all with education at the YOI.

83% of participants experienced issues and difficulties at school. 63% of participants left school aged <15yrs. 47% participants have no previous qualifications.

Scoring and reassessing dog behaviour weekly

Recording and monitoring numerical information

Engaging with wide range of visiting speakers, engaging in discussions, writing session reports and thank you letters

Developing portfolios: recording information about dogs, monitoring progress, creating promotional materials

Individual weekly Training Plans

Evaluating progress

Using photos and portfolios to make digital displays and advertisements to promote participating dogs

Monitoring the dogs' health; diet and health checks, measuring feeds, weighing dogs etc.

8-10 weeks

8-10 weeks

Personal Development

SQA Level 4 / Intermediate 1

Developing and achieving individualised targets and goals, self-evaluation and self-awareness

Gained by 100% participants from Cycles 1-12 (N=70)

Communications

SQA Level 3 / Access

Reading (95%)

Writing (98%)

Speaking (98%)

Listening (98%)

Gained by at least 95% participants from Cycles 3-12 (N=58) plus 7 peer mentors from previous cycles (N= 65)

ICT

SQA Level 4 / Intermediate 1

Core skills in using ICT, including use of Word and PowerPoint to make digital displays

Gained by 100% participants from Cycles 5-12 (N=46) plus 2 peer mentors from previous cycles (N = 48)

Numeracy

SQA Level 3 / Access

Calculation (97.5%)

Graphical Information (100%)

Measuring (100%)

Gained by at least 97.5% participants from Cycles 6-12 (N=40) plus 6 peer mentors from previous cycles (N = 46)

Qualification

Communications

SQA Level 4 / Intermediate 1

Gained by 12 peer mentors from Cycles 1-12 (Peer mentors N=24, gained by 50%)

Section 4e: Long term follow up

Methods of data collection

Reconviction was measured according to records available on the PR2 database. These records indicate any return to custody (including remand periods) and identify any reconvictions leading to a custodial sentence. Information on community sanctions (including community service) is not available on PR2.

Participants' reconviction records were monitored for the longest period available within the evaluation period (ending February 2015). Any reconvictions within 2 years following release were recorded. Only participants in the community for at least 6 months following release were included (others N/A). Reconviction was monitored for both Paws for Progress and Intervention Control Groups.

Future 'Status and Activity' were recorded only for Paws for Progress participants, as this was measured by direct communication with participants and verified by PR2. This was recorded at 6 months, 1 year and 2 years after release. As this information was not available for all participants (i.e. due to later release dates), 'Status and Activity' was also measured at 6 months, 1 year and 2 year time points after beginning the programme.

Results: Long term follow up

Reconviction within 2 years of release

Reconviction was measured according to the records available on PR2 which indicate any return to custody (including remand) and identify any reconvictions leading to a custodial sentence (not including community sanctions). Participants' reconviction records were monitored for the longest period available (ending February 2015); any reconvictions within 2 years following release were recorded and only participants in the community for > 6 months following release were included (others recorded as N/A). The lower time period of >6 months was employed due to low numbers of participants for whom a full 2 year period of follow up post release was available (only 24% of Paws for Progress participants).

Paws for Progress: There were 17 (24%) Paws for Progress participants who were not released or had not been released for a sufficient time period (>6mths) and were not included in measurements of reconvictions. Of the 53 Paws for Progress participants who had been released, there were 39 (74%) who were not reconvicted within 2 years, while 14 (26%) were reconvicted.

Intervention Control Group: There were 9 (31%) Intervention Control participants who were not released or had not been released for a sufficient time period (> 6mths) and so were not included in the measurement of reconvictions within two years of release. Of the 20 Intervention participants who were released, there were 15 (75%) who were not reconvicted within 2 years, while 5 (25%) were reconvicted.

Status and activity after release

Paws for Progress: As shown in Table 4.14, the proportions of participants who had been released and therefore contributed to long term follow up reduced as the time points extended to one and two years, with 76% of participants for whom two year post release status and activity was not applicable within the evaluation period.

From those released: at the 6 month time point there were 48/55 participants (87%) living in the community; at the one year time point there were 37/45 participants (82%) released living in the community; at the two year time point there were 12/17 participants (71%) who were in the community.

There were 10/55 participants (18%) for whom activity at the six month time point from release was unknown. There were 11/55 (20%) engaged with education / training, 11/55 (20%) engaged with training and employed, 9/55 (16%) were employed and 2/55 (4%) were full time parents. At the 6 month time point after release there were 10/55 participants (18%) engaged in volunteering / work experience opportunities through Paws for Progress. Therefore, at least 78% of participants were engaged in productive activity at 6 months following release.

The post release support provided by Paws for Progress was focussed mainly on the first six months following participants' release, although contact was not time limited. Therefore, there were 18/55 participants (33%) who engaged with volunteering / work experience opportunities through Paws for Progress within the first six months following their release (i.e. a higher number engaged with volunteering within six

months than that shown at the six month time point). There were no participants engaging with volunteering opportunities at one and two year time points.

There were 9/45 participants (20%) for whom activity one year from release was unknown. There were 12/45 (27%) engaged with education / training, 9/45 (20%) engaged with training and employed, 10/45 (22%) were employed and 2/45 (4%) were full time parents. Therefore, at least 73% of participants were engaged in productive activity at the one year time point following release.

There were 3/17 participants (18%) for whom activity two years from release was unknown. There were 5/17 (29%) engaged with education / training, 2/17 (12%) engaged with training and employed, 5/17 (29%) were employed and 1/17 (4%) was a full time parent, meaning that at least 76% of participants were engaged in productive activity at the two year time point following release.

<u>Status and activity after joining the programme</u>

As shown in Table 4.15, six months after beginning the Paws for Progress course, there were a high number of participants continuing to engage with Paws for Progress in HM YOI Polmont with 26/34 (76%) of those that remained in Polmont continuing on the course. Although relative to lower numbers of participants who were still remaining in Polmont at one and two year time points, there were still high levels of continued engagement (over 60%). It is also worth noting the high levels of continued contact with the researcher in the long term, enabling the activity of over 85% participants to be recorded at six months, one year and two year time points.

Six months after participants joined the course, 39/70 (56%) were still in custody serving the same sentence, while 30/70 (43%) were living in the community; only one participant (1%) was returned to custody. At least 90% of participants were engaged in productive activity at the six month time point after joining.

One year after participants joined the course, 22/70 (32%) were still in custody serving the same sentence, 43/70 (61%) were in the community, while 5 participants (7%) had returned to custody. At least 81% of participants were engaged in productive activity at the one year time point after joining.

Two years after participants joined the course, there were 30/70 participants (43%) for whom these data were not yet available. Of 40 participants with data available, 10 (25%) were still in custody serving the same sentence, 23 (58%) were living in the community, while 7 participants (18%) had returned to custody. Of the 40 participants, at least 75% were engaged in productive activity at the two year time point after joining.

Table 4.14: Paws for Progress (N = 70): Status and activity 6 months, 1 year and 2 years post release.

	Post release: 6 months		Post release: 1 year		Post release: 2 years	
Post release categories	**Frequency**	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**
N/ A (not released)	15	21%	25	36%	53	76%
Community	48	69%	37	53%	12	17%
Recall	4	6%	4	6%	1	1%
Remand	2	3%	0	0%	0	0%
New Sentence	1	1%	4	6%	4	6%
Activity post release	**Frequency**	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**
N/ A (not released)	15	21%	25	36%	53	76%
Working towards/ volunteering	7	10%	0	0%	0	0%
Education/ Training	11	16%	12	17%	5	7%
Training & Employed	11	16%	9	13%	2	3%
Employed	9	13%	10	14%	5	7%
Unemployed - seeking employment / training	4	6%	3	4%	1	1%
Unknown	10	14%	9	13%	3	4%
Paws for Progress in Polmont	1	1%	0	0%	0	0%
Other- Full time parent	2	3%	2	3%	1	1%

Table 4.15: Paws for Progress (N = 70): Status and activity at 6 months, 1 year and 2 years from starting the Paws for Progress course

Categories	From start of Paws: Follow up at 6 months		From start of Paws: Follow up at 1 year		From start of Paws: Follow up at 2 years	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Community	30	43%	43	61%	23	33%
Same sentence	39	56%	22	31%	10	14%
New sentence	1	1%	2	3%	5	7%
Recall	0	0%	2	3%	2	3%
Remand	0	0%	1	1%	0	0%
N/A	0	0%	0	0%	30	43%
Activity after Paws	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Paws for Progress in Polmont	26	37%	8	11%	2	3%
Working towards/ volunteering	14	20%	5	7%	0	0%
Education/ Training	15	21%	24	34%	16	23%
Training & employed	4	6%	8	11%	4	6%
Employed	2	3%	10	14%	7	10%
Unemployed - seeking employment /training	3	4%	4	6%	3	4%
Unknown	4	6%	9	13%	7	10%
Other- Full time parent	2	3%	2	3%	1	1%
N/A	0	0%	0	0%	30	43%

Table 4.16: Summary of the Results

	Paws for Progress (N = 70)		Waiting List Control (N = 43)	Intervention Control (N = 29)
Participants	Multiple disadvantages evident in histories, low levels of qualification and poor employment prospects. Extensive history of offending behaviour. Paws for Progress attracts those not otherwise engaging with learning / activities at YOI.		Not an independent group as majority (72%) join Paws for Progress - comparisons limited to psychometrics.	Sampling bias limits direct comparisons; key differences between Paws for Progress and Intervention Control (significantly longer sentence length and time in prison - near release).
Aim (short - medium term)	Paws for Progress (N = 70)		Waiting List Control (N = 43)	Intervention Control (N = 29)
a) improve behaviour	Yes (N=64)(significantly reduced Disciplinary Reports).		N/A	No (N=29) (no reduction in Disciplinary Reports).
b) increase educational engagement	Yes (written assessments improve significantly, attendance levels high, high numbers qualifications gained).		N/A	N/A
c) develop employability skills	EQi:S (N=13, low levels valid questionnaires) – No overall change. Significant improvement in Interpersonal Scale.		EQi:S (N = 13) – No overall or subscale changes.	EQi:S (N = 13) No overall change. Significant decrease in Stress Management Scale.
	AoN (N = 45)(Ceiling effect at pre-test for N = 7 / 13.5%) Overall significant improvement. 8 Items improved significantly. Increased confidence in social competencies.		AoN (N = 38) (Ceiling effect N = 4 / 10%) No overall change, 1 item significant decrease.	AoN (N = 38) (No ceiling effect at pre-test) - No overall change in AoN; 2 Items improved significantly.
	Self-esteem stable.		Self-esteem stable.	Self-esteem stable.
Medium - Long term follow up	Engagement remains very high (91%) after initial course and after leaving YOI (71%). 6mths after joining, =/>90% engaged in productive activity. 1yr after joining, =/>81% productive activity. 6mths after release: 87% living in community, =/>78% engaged in productive activity. 1yr after release: 82% in community, =/> 73% engaged in productive activity.		N/A (72% go onto complete Paws for Progress).	Only reconviction rates - within 2 years similar to Paws for Progress (25%). Due to longer sentences, typically subject to Integrated Case Management processes, enhanced support and potential licence conditions on release.

Section 5: Discussion

Key findings and interpretation in relation to assessing efficacy of programme

The level of multiple disadvantages commonly experienced by male young offenders was evident in the histories of both Paws for Progress and the Intervention Control participants. Furthermore, these high frequencies of adversity are likely a considerable underestimation of the difficulties commonly experienced; these figures represent only those which are stated on prisoner records, which are those highlighted through participants' experiences in the Criminal Justice System. Many short term prisoners' records are more limited, and the data described are not consistently recorded. Paws for Progress was voluntary, and appeared to engage prisoners who were not attracted to education, activities or other programmes. The level of engagement, as seen in high attendance and retention rates and continued long term engagement of participants, suggests a high level of enthusiasm and commitment was demonstrated by participants.

Institutional behaviour, as measured by Disciplinary Reports, improved significantly for Paws for Progress participants when comparing the three months before and after joining the programme. For 'Disobedient' behaviour and 'Vandalism', there was a significant reduction in the reports received; however, the medium to large effect size and significant reduction in 'Violent and Threatening' behaviour indicates this is largely responsible for the reduction in total number of Disciplinary Reports. Such improvements were not identified for the Intervention Control Group, for whom the total number of disciplinary reports received increased significantly; however, as total numbers of Disciplinary Reports were low for the Intervention Control Group pre-participation, this could represent a floor effect. In addition, disciplinary issues were extremely rare within Paws for Progress training sessions; in the entire 3 years of the evaluation, there were only 2 physical altercations between students associated with the programme and these did not occur during the training sessions themselves. This is perceived as very impressive by prison staff and management in comparison with other areas. However, due to the way that Disciplinary Reports are recorded (by individual, not by area) it would be difficult to compare these directly with another work area or education / class, especially as the Paws for Progress programme has an unusual format and longer length of engagement than is typical

for this prison environment. The difficulties in conducting direct comparison (without impacting negatively on other areas who have different aims and could reasonably view the comparison as unfair) in this applied context would be an additional issue.

The educational progress made by Paws for Progress participants was evident in the written assessments; word count increased significantly, almost trebling from pre to post-test, the number of valid points (knowledge demonstrated) increased significantly, almost doubling from pre to post-test and the quality of grammar also improved significantly from pre to post-test. Whilst such aspects are difficult to quantify, this suggests a change in attitude towards learning, and increased thought and consideration within answers. One hundred per cent of Paws for Progress students gained educational qualifications as a result of their participation in the programme, with most students gaining at least nine qualifications. Given the low levels of previous qualification of Paws for Progress students, for many this represented their first qualifications gained, and for almost all students, the number of qualifications achieved more than doubled the total number of qualifications they had received previously. Educational attainment can be perceived as a crude measure of learning, as suggested in the following quote from William Butler Yeats: *"Education is not the filling of a pail, but the lighting of a fire."* However, it is much easier to measure how the high the pail is filled than to measure the lighting of a fire; the triangulation of the written assessments with the qualifications gained strengthens the case for Paws for Progress effectively increasing engagement with education, and suggests furthermore that participants have gained a more positive approach towards learning.

Employability skills were assessed using self-report in the form of psychometrics and questionnaires. The BarOn EQi:S did not prove to be an appropriate measure for this population, given that only 25% of the participants completed questionnaires met the criteria for validity, despite refinement of the measure during development of the methodologies for the purpose of this study (see Section 4, Chapter 3). Students were the most likely to experience difficulties when completing the BarOn EQi:S in comparison with the other self-report measures, which frequently appeared to be due to the double negatives and rephrasing of very similar items to reverse the direction of answer (from True to Untrue). As these issues are present in many psychometric tests which are used with offender populations, this has considerable implications for

future methodology, and suggests such complex answering scales are less appropriate for use. Although the valid N for Paws for Progress participants was low, there was a significant increase in the Interpersonal Scale on the BarOn EQi:S; there were no increases found for either of the control groups. This is in line with the expected improvements to interpersonal skills which were anticipated in Paws for Progress, and suggests a larger effect may be present if the measuring tool was more suited to the sample of participants. This suggestion is corroborated by the results on the Assessment of Needs, which demonstrated a significant improvement to Paws for Progress participants' perceived social competencies, both in Total score and that of 8 individual items. Comparable increases were not found on the Assessment of Needs for either of the Control Groups. There was, however, a ceiling effect in this measure at pre-test identified in the Paws for Progress group (and to a lesser extent, the Waiting List Control group) which was not present in the Intervention Control Group. The issue of students seeking to create a favourable impression of themselves at pre-test was recognised during the early phases of the study (see Section 4, Chapter 3) and whilst steps were taken to try and prevent this happening, it remains a methodological concern for evaluating such programmes. The lack of change in the Rosenberg Self-esteem Scale was as expected for all three groups, with scores remaining stable from pre to post-test. This suggests that the term self-esteem is not suitable as a descriptor for expected change through intervention. From the evidence gathered here, it appears more appropriate to suggest the participants' confidence in their abilities (and particularly their social competencies) improves.

Limitations

Whilst the control groups had limited utility in this study, looking at Paws for Progress participants alone with no control group would have limited the study further, as it could be argued that changes pre and post intervention cannot be attributed directly to the intervention. Nonetheless, this methodological issue remains present on some measures with the Control Groups which were feasible for this study. For example, although we can attribute short and medium term outcomes to participating in Paws for Progress, attributing long term outcomes to participation in the intervention remains inherently problematic. The measures which can be used with control groups are very limited, as the motivation to continue to engage with the researcher is not present outside the Paws for Progress group. Given the many factors

which contribute to long term outcomes such as reconviction, it is not possible to attribute this outcome to any single intervention while ignoring the many services the young people engage with before, during and after their release. Instead, it is more applicable to consider the <u>contribution</u> which Paws for Progress makes towards the long term outcomes and goals.

Long term follow up provided an insight into the positive progress of Paws for Progress participants after they had left the institution, but it was not possible to compare groups as no follow up was available. Reconviction rates, which were available for Paws for Progress and Intervention Control participants offer very limited information, and are inherently difficult to attribute directly to participation in an intervention as many factors affect reconviction rates (e.g. age, sentence length, and support available on release varies). Groups differ in offence patterns, sentence and support available. Reconviction rates are of interest to funders and public bodies as these are the most widely used method of measuring reoffending; such rates are particularly pertinent to male young offenders, who are recognised as most likely to reoffend (Audit Scotland, 2012). However, there are differences between how reconviction rates are measured (all reconvictions versus reconvictions resulting in a custodial sentence) and time periods over which reconviction rates are calculated (6 months, 1 year or 2 years). Overall, reconviction rates have remained relatively static in Scotland over the past 13 years (Audit Scotland, 2012). Furthermore, overall reconviction rates only give an overview of reoffending which leads to conviction; changes in the nature of reoffending behaviour (such as changes in the seriousness of crimes committed) are not reflected, and the time delay in reporting has led to the Scottish Government recently concentrating on publishing detailed analysis of one-year reconviction rates only (Audit Scotland, 2012). It does not provide meaningful information for small scale intervention programmes to compare reconviction rates against changes in national reconviction rates, or against rates for other prisoner groups. For example, in this study, Paws for Progress participants were serving shorter sentences than Intervention Control Participants. There are different sentencing options available to courts and there is a link between the type of sentence and the likelihood that someone will reoffend, with people serving short prison sentences recognised as the most likely to reoffend (Audit Scotland, 2012). Prisoners serving sentences of four years or more receive additional support from the Scottish

Prison Service and Criminal Justice Social Work. Furthermore, Community Payback Orders were introduced in 2011 and were designed to achieve effective justice and reduce reoffending; the impact of Community Payback orders on ensuing reconviction rates for participants could not be examined in this study.

Summary in relation to Research Questions

This chapter used quantitative analyses to determine the efficacy of the Paws for Progress programme in achieving anticipated short, medium and long term outcomes. Statistical analyses demonstrated improved outcomes for Paws for Progress participants, and comparable improvements were not demonstrated for control groups, strengthening conclusions drawn that these effects result from the Paws for Progress Intervention.

1. *Does Paws for Progress improve the participants' behaviour?*
Paws for Progress improves participants' behaviour in the institutional environment.

2. *Does Paws for Progress increase engagement with education?*
Paws for Progress increases engagement with positive learning opportunities, leading to enhanced skills and attainment.

3. *Does Paws for Progress lead to improved employability skills?*
Paws for Progress has a positive impact on the students' perception of their social and emotional competencies, and their confidence in their abilities, suggesting improved employability skills and enhanced employment prospects.

This quantitative evaluation of outcomes will contribute towards assessment of the Paws for Progress Logic Model in delivering intended outcomes (developed in Chapter 2). Next, we will review the qualitative outcomes in Chapter 5, and evaluate the participants' perspectives of Paws for Progress, to further determine mechanisms for success.

Chapter 5 - The effectiveness of the Paws for Progress Programme: Qualitative measures of success for male young offenders

Summary

This chapter assesses the effectiveness of the Paws for Progress intervention from the perspectives of the young people involved. This chapter uses qualitative analyses to determine the efficacy of the Paws for Progress programme in achieving anticipated short to medium term outcomes, thereby continuing Step 5: Evaluation. The outcomes identified through the qualitative analyses strengthen conclusions drawn regarding the specific effects of the Paws for Progress Intervention, allowing us to broaden our research questions to ask how and why changes identified occur. This evaluation of outcomes assesses the Paws for Progress Logic Model developed in Chapter 2, reviews methodologies for programme evaluation developed in Chapter 3, triangulates findings with the quantitative outcomes identified in Chapter 4 and informs the discussion and conclusions of Chapter 6.

Section 1a: Introduction

Qualitative research has great potential to generate rich data regarding the experiences of offenders, aiding identification of key mechanisms for change. Elliott et al (1999) developed guidelines pertinent to qualitative research. The following are integral to assessing the quality of the research: Owning one's perspective; Situating the sample; Grounding in examples; Providing credibility checks; Coherence; Accomplishing general vs. specific research tasks; Resonating with readers.

Similarly, Mays and Pope (2000) highlight the following elements: Triangulation (comparing results from multiple methods of data collection or multiple data sources); Respondent validation or "member checking" (such as discussing the researcher's account with participants to establish the level of correspondence); Clear exposition of methods of data collection and analysis; Reflexivity (sensitivity to ways in which the researcher / research process shaped the data); Attention to negative cases (including exploration of alternative explanations for data collected, searching for and discussing elements in data that seem to contradict the emerging explanation of the phenomena: "deviant case analysis"); Fair dealing (ensuring that the research design explicitly incorporates a wide range of different perspectives). The extent to which this study and previous research conforms to these guidelines is reviewed as this chapter progresses.

Turner's (2007) qualitative exploratory study described the experiences of six adult male offenders participating in a prison based dog training programme using in-depth unstructured interviews. Turner (2007) identified seven key themes: patience; parenting skills; helping others; increased self-esteem; social skills; normalising effect; calming effect on the environment. Participants related the benefits of being involved in programme to their personal development, their families, the prison environment, and their futures. However, the author did not specify their theoretical orientations, previous experience or personal anticipations (owning their perspective; Elliot et al, 1999; reflexivity; Mays and Pope, 2000). Furthermore, any negative aspects of the participants' experiences identified in the data were not reported (attention to negative cases; Mays and Pope, 2000).

Furst (2007) studied participants in prison based dog training programmes and discussed the effects of their relationships with the dogs in relation to desistance

from crime. Similar features were noted in the interview data (adult female inmates N= 15 and adult male inmates N=7) to those identified by Turner (2007), including reported improvements in patience, feeling a sense of accomplishment from their achievements with the dogs, improvements in communication, facilitation of their relationships (including their families) and providing opportunities to help others. These factors are related to the development of a pro-social identity and future desistance from crime (Furst, 2007). However, methods were not reported in full (including lack of detail regarding interview procedures) and the methodological reflections were limited, again making it difficult to assess the contribution of the research.

Currie (2008) provided a comprehensive evaluation using qualitative methods, exploring the experiences of a dog training programme from five perspectives: inmate trainers (N=16); former inmate trainers (N=6); non-trainer inmates (N=3); staff (N=5); and the researcher. Reported positive emotional outcomes were: positive social support; sense of pride gained; increased patience; improvement in self-esteem; feeling of giving back to society; humanising element and connection to the outside world. Positive practical outcomes were: improvement in responsibility; more positive prison environment; opportunities to help others; goal setting and achievement; employability skills gained; motivation and improvement in behaviour. Whilst this research confirms and extends the findings of Turner (2007) and Furst (2007) and conforms closely with guidelines for qualitative research (Elliot et al, 1999; Mays and Pope, 2000) unfortunately this was not peer reviewed/ published research. A full review of the qualitative studies of prison dog training programmes in provided in Chapter 1 (Section 5: Table 1.1).

While there are notable limitations in the qualitative studies described, there is clear convergence between the themes identified across study sites and participant groups. By identifying key areas of anticipated change, these studies assisted and informed the development of Paws for Progress at HM YOI Polmont, the logic model and the research evaluation employed to assess the programme's efficacy. However, as it was unclear how much selection bias and methodological issues had impacted on the previous research, the qualitative outcomes were explored first during the pilot phase of this evaluation (see Chapter 3: Section 3). The initial themes identified are compared with those highlighted in previous research in Table 5.1.

Table 5.1: Key themes identified in previous research (Davis, 2007; Furst, 2007; Turner, 2007; Currie, 2008) and in Paws for Progress Pilot stage

Rich Insights: Key Themes	Paws for Progress: Pilot stage
Patience	Management of emotions: Patience
Engagement in worthwhile activity	Enjoyment and enthusiasm for the course
Social support Improvements in communication skills Improved interpersonal skills (teamwork / peer mentoring)	Social impact: Working with others
Facilitation of relationships with others Parenting skills	Relations with families and parenting skills
Helping others	Teaching / Helping others
Sense of accomplishment	Rewarding / Sense of Accomplishment
Increased self-esteem	Improved confidence
Normalising /calming effect on the environment	Positive effects: Mood / Well-being
Vocational skills Achieving goals Responsibility	Motivation / Aspirations Problem solving / Working independently
	Institutional behaviour
	Change in attitude towards dogs / training

Table 5.1 shows a comparison of themes identified in previous research and those identified in the Paws for Progress pilot. There are similarities in many themes identified but also differences; for example, changes in behaviour have not consistently been identified as an outcome for participants in prison dog training programmes (only by Currie, 2008). This is likely due to the confounding effects of selection bias in programmes previously examined. By triangulating findings with quantitative outcomes, the qualitative analyses to be described here will contribute to the most comprehensive evaluation of a prison based dog training programme to date. The qualitative analyses of outcomes in this chapter will strengthen conclusions further by clearly presenting methods and demonstrating the extent to which the outcomes identified change, by quantifying the frequency of occurrence of each theme.

Section 1b: Step 5: Evaluation: Purpose

The evaluation described in this chapter will provide comprehensive qualitative analysis of short - medium term outcomes for Paws for Progress participants. This chapter focuses on all four aims of the Paws for Progress intervention programme:

a) improve behaviour (in the institutional environment and in the long term)

b) increase educational engagement (attitudes to learning, progress and achievements)

c) develop employability skills (social competencies; emotional management; ability to work independently and as part of a team; responsibility and decision making; problem solving; working towards targets and goals)

d) enhance well-being (motivation, self-efficacy and positive pro-social focus)

As shown in Table 5.1, there is good reason to anticipate that these aims will be relevant to qualitative outcomes. Qualitative measures, in the form of semi-structured interviews, were collected over a three year period, to gain insights into participants' perspectives and assess the efficacy of the intervention in meeting these aims.

Section 2: Research Design and Methodology

Researcher's perspective (reflexivity)

In this study, the researcher (RJL) was responsible for both developing and delivering Paws for Progress, and for evaluating the programme's efficacy, presenting a potential conflict of interest. Furthermore, the researcher had previous experience in delivering Human Animal Interaction (HAI) services, through the Therapet pet visitation scheme and in her role as a dog training instructor; and had previous experience exploring HAI in a research capacity (unpublished research examining human-dog relationships). The researcher therefore anticipated positive outcomes in the current research. However, the researcher's perspective and ethnographical approach (to provide a descriptive rather than explanatory analysis, the ethnographer immerses herself in the everyday social world of the group) also allowed for methodological strengths. The programme development and evaluation

are interlinked in the 5 Step approach; as a result of these connected responsibilities, the researcher had a higher level of awareness and understanding of related issues than would be commonly expected for either a practitioner or researcher. There was excellent rapport with participants, making it easier to examine and understand sensitive issues or experiences that are subtle or hard to articulate or quantify on survey questionnaires. Whilst supportive of effective development of this programme, the researcher was equally committed to high quality robust research.

Participants

The interviews were conducted from Cycles 1-12 of the Paws for Progress course (July 2011 – Aug 2014). Seventy participants completed the course (see Chapter 4; Section 2) during this evaluation. Of these, 68 (97%) completed pre-test interviews and 66 (94%) completed post-test interviews after the initial eight week course (4 participants unable to complete post-test interviews for: health reasons =1; other conflicting commitments = 3). Twelve participant interviews from the Pilot Phase (Cycles 1 and 2) were included in these totals and analyses in addition to those from Cycles 3 – 12. For the 66 post course interviews, 53 participants were over 18yrs (18-21 yrs), and 13 were under 18yrs (16-17yrs). Full details situating the sample are provided in Chapter 4 (Section 3a).

There were an additional 11 interviews conducted with continuing students (mentors and assistants) who completed the course and were interviewed again following completion of another course cycle in their new role. There were therefore 77 post course interviews in total, involving 66 individual participants. Written statements provided by 23 students (who also contributed interviews) were included in a single document source. Therefore, in addition to 77 interviews, an additional source (document containing all written statements) was included, giving 78 sources for analysis.

Methods of data collection

One-to-one interviews were conducted pre and post participation in the course. These were in a separate area of the workshop away from the main group of students, or within a small office adjoining the workshop area, or in interview rooms at the YOI. The semi-structured interviews were audio recorded on a Casio Dictaphone, allowing

the interviewer to attend to the respondent; questions were open ended but specific, and the same to all participants. Questions were impartial and non-leading (see Chapter 3, Section 3; for Interview Schedules, see Appendix 3). Pre-test interviews ranged between 1min 1sec and 10mins 25sec; post-test interviews ranged between 1min 35sec and 18mins 23sec in duration. Written statements were provided voluntarily by 18 students when involved in the course, and additional statements were provided by 4 students post release and 1 student in an adult prison establishment (all written statements provided by students who also contributed interviews).

Data manipulation and analysis

Following the Pilot Phase, a research assistant independently identified themes from this subset of interviews, which were then compared with themes identified by the researcher, noting convergence and divergence (see Chapter 3, Section 4). Similar themes were identified, indicating reliability for the initial thematic analysis. Audio files from all pre and post-test interviews were transcribed and analysed using the NVivo 10 software package. Firstly, transcriptions were coded by interview question, subsequently providing each question with a list of all responses for further examination and categorisation. Themes identified during the pilot stage were created as individual nodes to which responses could be coded. As data were analysed, themes were adapted (combined/ reduced or split to sub themes within a theme) to reflect their content. The themes identified were then retained for continued coding of the data. As the analyses progressed, thematic categories could be restructured or expanded according to the meaning of the statements coded to the theme; themes were also examined for internal convergence and external divergence (i.e. internally consistent but distinct from one another, although not necessarily mutually exclusive) at regular intervals. NVivo generates lists of themes (nodes) providing frequency of coding to each theme according to the number of sources in the analyses, which were used to generate percentages of sources which related to each theme.

Section 3: Results: Evaluating the efficacy of the Paws for Progress Programme: Qualitative measures of success for male young offenders

Section 3a: Pre-test interviews

The majority of the responses from pre-test interviews (see Appendix 3) were used to verify background / histories of the sample provided in Chapter 4 (Section 3a). The frequencies of response to two of the remaining questions asked in pre-test interviews are presented in Table 5.2.

Table 5.2: Paws for Progress participants' previous experiences: Usefulness and Changes as a result of taking part (N=68).

Could you tell me about any programmes, work parties or education you've been involved in since you have been at the prison? (not analysed here, see Section 3a in Chapter 4)		
How useful did you find it / them?	**Frequency**	**Percentage**
No, not useful	18	26.5%
Possibly useful in some (unspecified) way	24	35%
Yes, useful in personal development	9	13%
Yes, useful in skills/learning	16	24%
Yes, useful in personal development and skills/learning	1	1.5%
Did you notice any changes in yourself as a result of taking part?	**Frequency**	**Percentage**
No changes	40	59%
Possibly some unspecified changes	7	10%
Yes, changes in personal development	16	23.5%
Yes, changes in skills/learning	4	6%
Yes, changes in personal development and skills/learning	1	1.5%

As shown in Table 5.2, 26.5% of participants did not feel their previous experiences were useful, and nearly two-thirds had not noticed any changes in themselves as a result of taking part. Only 38.5% of participants described a way in which their previous experiences had been useful to them, and only 31% of participants described a change in themselves as a result of taking part.

Section 3b: Post-test Interviews: Analyses of responses according to questions

When asked about their experiences on the course, all 66 participants (100%) responded that they had enjoyed participating. 100% of participants felt that the course had been useful to them; 10 participants' responses (15%) were non-specific about the way in which they felt it was useful. From the remaining 56 participants' responses (which could be categorised more than once): 31 (55%) indicated that they felt the course was useful generally (multiple uses identified); 21 (38%) related the usefulness specifically to their personal development; 30 (54%) related usefulness to their learning; 39 (70%) related usefulness to improved understanding of dogs / dog care; 11 (17%) related usefulness specifically to future employment; 11 (20%) related usefulness to improved behaviour, and 22 (39%) related usefulness to their abilities to teach and share the information they had learned with others.

When asked about whether they had noticed any changes in themselves as a result of participating, 65 (98.5%) of 66 respondents indicated that they felt positive changes had occurred. Of the 66 respondents, one did not note any changes and 2 (3%) suggested there were changes but did not specify what the changes were; 8 (12%) described a single change while 55 (83%) described multiple positive changes that had occurred. From the 63 respondents that identified changes (responses could be categorised more than once) positive changes were related to: well-being in 16 (25%) of responses; 19 (30%) indicated that they noticed changes in their learning and skills / employability; 25 (40%) responses related changes specifically to their social skills; 18 (29%) related changes to their self-control and behaviour; 24 (38%) described changes as increased empathy and improved understanding of dogs; 26 (41%) related changes specifically to their improved confidence; and 37 (59%) described improvements in their management of emotions (including anger).

100% of respondents spoke positively about their experiences working together in a group. When asked about how the dog training course compared to other activities (work, education, programmes or courses) available to them in prison, 100% of the participants' responses were favourable to the dog training course. There were 8 participants (12%) who indicated that they felt the course was the best activity available but had not participated in any other constructive activity in the prison; 3 (5%) felt that the dog training course was at least as good as the best alternative

activities, and 55 (83%) felt the course was better than other activities available at the prison.

In response to questions about their experiences with the dogs on the course, 100% responded positively regarding their enjoyment of this aspect of the course and their feelings about the dog(s) they had worked with. When asked if they felt their experiences would affect their behaviour and attitude towards dogs in the future, 100% of participants were emphatic about the positive effects and how their learning would indeed change the way they regarded and behaved towards dogs.

When asked if the course was what they had expected it to be, 100% of the 66 participants' responses were positive regarding the course. However, although 5 (8%) responded positively but felt they had no prior expectations and 12 (18%) responded that they expected it to be very good, the vast majority (74%) of participants indicated the course was not what they had expected prior to taking part. Of these, 21 (32%) responses indicated that they felt the course was far better than they had expected it to be, while 28 (42%) felt the course was drastically different from what they had expected *and* better. This question provoked many interesting responses, such as:

"I didn't think it was going to be as good… I thought it was going to be crap."(P16:PI)

"It was different from what I expected - I thought it was a lot better, than what I thought it would be like. It was definitely a lot more fun, and more helpful."(P1:PI)

Even when discussing the course with other students, the unexpected nature of how much they would enjoy participating was noted, as one student explained:

"Naw, I dunno what I expected it to be. Kev says to come down here, you'll like it, you'll get a laugh but you won't expect it. It'll be good. Come down and it was brilliant. I owe Kev one but I'm not telling him that!"(P51:PI)

When asked for suggestions for improvement to the course, 100% of participants responded in a positive manner regarding the format they had experienced (i.e. provided comments and assurances about enjoying it in their response). From the 77 responses to this question (all interviews), 6 (8%) were positive about their experiences and suggested they had no ideas for improvement; 48 (62%) responded that they believed the current format was perfect; 5 (7%) were positive and also

requested additional time with the dogs and 4 (5%) were positive and suggested additional activities that the students and dogs could do together (e.g. an enclosed area that would allow for training off lead). A further 14 (18%) were positive about the format and instead suggested environmental changes; however 9 (12%) of these were responses made by students during the pilot stage of the course, and related to the need for a distinct training area for the dog training (rather than a workshop shared with other activities). This suggestion was made by 75% of the students involved in the pilot phase (N=12), and was instrumental in the change to the activity areas used. Participants were also keen to provide their views in relation to the continuation /expansion of Paws for Progress within HM YOI Polmont; 18 participants voluntarily provided statements of this nature. Furthermore, 13 participants provided ideas regarding potential future expansion to other prisons and communities.

Section 3c: Thematic analysis

Frequency of Themes

The number of participants and total number of sources which contributed to each theme are provided as frequencies and as percentages in Table 5.3. Themes are provided in order of the frequency of participants' responses and sources coded to that theme, from lowest frequency to highest. Next, these themes will be explored in this rising order of frequency, grounding the data in examples to illustrate the themes which were generated from the data. Examples are drawn from all sources (post-test interviews, N=66; peer mentor interviews, N =11 and document containing written statements). As shown in Table 5.3, the percentages are very similar for all of the themes whether based on post-course interviews only, or all data sources; therefore, to draw on the full richness of the data collected, examples are drawn from all sources. Quotations are italicised and indented and are identified by participant number (numerical identifier, P1-P70) with source type (PI = Post-test Interview; PMI = Peer Mentor Interview; WS = Written Statement). Where small differences are found between source types for a particular sub-theme, this is discussed.

Table 5.3: Thematic analysis: Frequency occurrence of themes in initial post-test interviews and then as a total of coded sources (lowest to highest); Themes are in bold while sub-themes (which contribute to the themes total frequencies) are provided below.

Name of Theme	Initial post-test interviews (N=66)		All sources (N=78)	
	Frequency	Percentage	Frequency	Percentage
Negative aspects	**18**	**27%**	**18**	**23%**
Emotional management	**37**	**56%**	**46**	**59%**
Patience	28	42%	34	44%
Controlling anger	26	39%	34	44%
Impulsivity: Self-control and behaviour	**38**	**58%**	**48**	**62%**
Self-control	24	36%	31	40%
Institutional behaviour	30	45%	37	47%
Social impact	**55**	**83%**	**65**	**83%**
Families (including parenting skills)	10	15%	12	15%
Peer support	34	52%	43	55%
Working together	53	80%	63	81%
Communication skills	22	33%	26	33%
Improved skills	**57**	**86%**	**66**	**85%**
Education or learning	40	61%	47	60%
Employment	42	64%	50	64%
Self-efficacy	**58**	**88%**	**67**	**86%**
Problem solving	20	30%	23	29%
Thinking independently	25	38%	30	38%
Confidence	37	56%	41	53%
Sense of achievement	46	70%	54	69%
Aspirations for the future	20	30%	25	32%
Charitable purpose	**57**	**86%**	**68**	**87%**
Teaching others	43	65%	52	67%
Helping others	46	70%	55	71%
Motivation	**65**	**98%**	**76**	**97%**
Commitment and responsibility	37	56%	44	56%
Rewarding	52	78%	61	78%
Enthusiasm	60	91%	70	90%
Positive effects	**65**	**98%**	**76**	**97%**
Improved mood and wellbeing	20	30%	28	36%
Therapeutic effects inc bonding	34	52%	40	51%
Change from prison environment	60	91%	67	86%
Enjoyment	65	98%	76	97%
Dogs (not analysed in this chapter)	**66**	**100%**	**77**	**99%**
Attitudes to dog training	58	88%	64	82%
Attitudes towards dogs	63	95%	71	91%
Feelings about dogs	64	97%	74	95%
Parallels (between students and dogs)	32	48%	36	46%

Negative aspects

Given the high frequency of positive responses in the interview questions, the descriptions of negative aspects were explored next. Only 18 (23%) of the interviews included some form of negative experience, with references made by 18 (27%) participants in post-course interviews only. Of the 18 participants, 6 (33%) related difficulties experienced by students during the pilot stage of the course when sharing space with other activities (as described previously), which were resolved when a dedicated training area was provided. Two (11%) participants emphasised the importance of working with security staff who were motivated to be involved with the activities involving the dogs, which again was resolved following the recruitment of dedicated member of prison service staff to oversee the programme.

The remaining negative aspects identified (44%), whilst including some form of negative experience, were nonetheless also positive in content. Although students described sadness when particular dogs left the programme, this was related to their enjoyment of having the opportunity to help the dog:

> *"Murphy was a wee bit of a challenge, I was sad to see him go and that, but obviously that's part of the course, what you're aiming for. That's the aim of the course anyway, to be getting them rehomed."*(P4:PI)

While students experienced sadness at being separated from dogs, this was simultaneously related to the sense of achievement experienced due to helping the dog move onto a new home:

> *"Gutted. He got rehomed. Happy as well. I felt proud of myself."*(P22:PI)

Similarly, when responses referred to finding working with a dog to be challenging, this was related to positive emotions and experiences:

> *"It's been good experiences. It's hard at first, working out how to get a connection with a dog, but once you've got that it's sorted."*(P11; PI)

The connections that formed between students and their dogs could also lead to students feeling sadness when learning about situations commonly facing dogs:

> *"Learned about dogs getting put down. That was quite bad. Learned to be calm with dogs."*(P48; PI)

And the sadness that students felt when learning about past experiences of dogs they worked with also impacted on the students' own behaviour in a positive way:

> "I didn't think what it was. When I was in the education I could see people and it inspired me, just seeing people work. But nah, I wasn't really expecting to do these sort of things. I came down here, it shocked me when I was doing it. Just like wow. The first time you see them, the way they act. You feel upset when you see them. Then week by week you want to improve on the dogs so you keep your attendance going. Keep your attitude towards dogs. Speak clearly to the dogs. Giving it the right motivation. Then week by week that dog will just keep improving."(P57; PI)

There were aspects of working with the dogs which could be perceived as negative but it is clear that these elements, while potentially upsetting, were beneficial to the students' progress and development. This highlights the importance of careful management of the programme and a need for awareness of how students can be affected emotionally.

Emotional management

Improvements in management of emotions were referenced in 46 interviews (59%). This theme was subdivided between patience and controlling anger (which are not mutually exclusive but were distinct). While 37 participants (56%) referred to improved management of emotions, 28 (42%) related specifically to patience while 26 (39%) related to controlling anger.

Patience

Almost half of the students felt their patience had improved. Students recognised that it was necessary to remain calm when dogs are present, and be compassionate to their needs and emotional state; in doing so, the students controlled their own emotions:

> "I thought it's been very useful and that for us, because it gave us a lot more patience."(P69:PI)

"I also really enjoy working with the dogs as I did not have much patience before I came to the work with the dogs but now I would say my patience has really improved over the duration I have been here."(P30:WS)

As the students` understanding of the dogs increased, they recognised the need to move at the pace each dog needed in order to help the dogs learn:

"Patience. Obviously the dogs don't learn right away so I think I've got a wee bit more patient. You learn to slow down a wee bit."(P32:PI)

"Yeah I've been more relaxed and not nervous. You're reacting differently, you're patient. Instead of like telling it come on hurry up and do this, you are just relaxing and letting the dog go its own pace."(P57:PI)

Their improved patience was not restricted to their interactions with the dogs:

"It's revealed how much patience I can have – for myself, for animals and for other people too".(P6:PI)

"I noticed I gained a lot more patience and I wasn't as quick and easy to judge others, you try to see their best instead. And I gained a lot more confidence in myself."(P5:PI)

By improving their management of their emotions, students felt more able to progress with their own development too:

"I discovered that I was more patient than I thought I was. Eh, I could learn new skills if I just put my mind to it and thought about it."(P27:PI)

"Aye. I feel like my patience and that is a lot better. I feel like I'm a lot more understanding of others."(P69:PI)

Controlling anger

It was clear that, prior to joining the course, students had not always controlled their anger, or understood the impact that fear would have on their own dog's well-being:

"When I used to have dogs, I've had dogs all my life. If the dog was bad I'd raise my hand to it so it would get scared and it wouldn't do it again. I've realised that that doesn't work. All that does is builds up and builds up and builds up and you

do it again and it just wants to bite you. I never realised that before, I just thought if you make it scared then it'll be submissive and you're the leader of the pack. But positive reinforcement, treats, toys or whatever. They feel comfortable working for, so... That's what I've learned, that you can't just raise your hand to a dog. I just thought it's a pet. Since working here I've realised that you can't treat dogs like the way I was treating them."(P40:PI)

The responsibility involved in working with dogs impacted on the students' ability to manage their anger:

"I have always been angry at things in life and found it hard to control my temper, part of the reason I ended up in prison. But I changed when I went on the course and worked with Missy, an 8yr old staffie cross bulldog that liked things quiet."(P20:WS)

"Aye. Dogs are like people. Because see when you get angry with a person you lash out. With like, a dog if they don't do as you're told - you don't want to lash out at a dog because you're like the controller. The trainer. Responsible. I had problems before – with anger and that – but I think I'm better managing it now." (P13:PI)

Being involved in the course also helped students to manage their anger at their situation and to cope within the prison environment:

"I was on the course when my dad died and found being on the inside hard. Having Paws for Progress to go to was good for me and helped me control my anger."(P33:WS)

Students related these changes in their management of emotions to their understanding of behaviour generally, and felt it was a worthwhile skill to obtain:

"I've changed... Anger and my attitude and that. I've got new skills."(P13:PI)

"The anger management side of things I would say... It's definitely helping my problem solving skills a lot more."(P4:PI)

Impulsivity: behaviour and self-control

Two thirds of students related their experiences to improvements in their self-control and behaviour, with 31 (40%) interview responses describing improved self-control, and 37 (47%) describing improvements to their behaviour in the institutional environment.

Improved self-control

Students frequently related their progress through the course with an improved ability to control their behaviour and avoid conflicts with others:

> *"Aye I've seen a difference cos usually I'm just like, dead impulsive. Like, if somebody says something to us, I'd say something back. But no, I just patch (leave) it now."(P40:PI)*

> *"Paws for Progress has helped me stay calm and stay out of trouble."(P16:WS)*

> *"Aye. Definitely useful. Now obviously I'll be able to control myself and work with it."(P55:PI)*

> *"It teaches you different, it teaches you different as well. You learn not to solve things by shouting or threats or violence. It changes how you think about people, you think about why they're acting the way they are."(P10:PI)*

By considering the impact their behaviour could have on others, students learnt improved self-control; this was particularly prevalent in mentors' responses:

> *"Paws for Progress has been a life changing experience for me. When I first came on to the course I didn't like listening to people telling me what to do, but having the dogs there meant that to help teach them I had to listen. I have learnt to be more patient, to listen, and to understand dogs' behaviour and body language. Above all, I have learnt self-control, making me a better person."(P38:WS)*

By prioritising the needs of their dogs and their desire to help them, students experienced satisfaction at their own ability to change, and felt a sense of achievement at their progress:

"Usually I'm really impulsive and I don't think before I do something. But obviously I need to think before, for the dog's safety and before I do anything." (P40:PI)

Institutional behaviour

These improvements to their self-control were recognised as impacting on students' behaviour within the prison in general:

"Aye there's no been any trouble since I started this. Aye, I like being down here with the dogs and that. When I wasn't doing this dog training I used to get reports a LOT, know what I'm talking about?"(P42:PI)

"We are learning to be patient for the dogs for them to take to learning. This is also helping me in the hall cos I am more patient with staff."(P60:WS)

"Aye I've seen a difference... Sometimes in the hall and that I could be fighting another boy but I just thought like, if I do that I'll patch (leave) the dogs so I can't be bothered with it all."(P40:PI)

Although the programme facilitators did not remove students from the course for misconduct reports in other areas of the prison (or threaten to do so), students frequently expressed concerns about risking their place on the course. They were keen to avoid missing any of the training sessions (which could happen if they were disciplined for misconduct and placed on a short term restriction of activities by prison staff). These concerns clearly affected their behaviour in other areas of the prison such as the residential halls, with students considering the consequences of their actions and avoiding conflicts and disciplinary reports.

"It's made me want to keep my head down. I want to stay on the course. If I get into trouble they'd probably take us off it." (P36:PI)

"Since I've been at Dog Training I think I've been calmer. Just like, I like coming up and I like working with the dogs, I like the dog that I've got. Just trying to be more calm in the hall and try and tone it down a wee bit. So I don't want to screw this up."(P40:PMI)

"After a couple of months at Polmont, I already had my fair share of reports, fights and solitary confinement, mostly due to my own anti-social behaviour.

Once I'd been accepted onto the course I was told that I better change my behaviour or I'd risk being removed from it. After just one day on the course, having enjoyed myself so much, I decided to give it a go and make a real effort to change my ways. As the weeks went on I continued to work hard on improving my behaviour both on the training course and in general. I was actually beginning to surprise myself with how well I was doing. For the first time in my life I began putting others before myself and started thinking about the consequences of my actions before doing something. If I was put on report on the day before our training session I would then miss that training session, as would the dog I'd be working with. He would stay at the kennels while all the other dogs came in, so therefore he would effectively be punished for something I'd done. I didn't like the sound of that, and so thankfully I avoided that ever happening to me."(P8:WS)

Social impact

In 65 (83%) of the interviews, students described positive effects that their experiences at Paws for Progress had on their social worlds. This was linked to relationships with their families in 12 (15%) of the interviews, to peer support in 43 (55%), and to working together as a team in 63 (81%), with a specific focus on communication skills in 26 (33%) of the interviews.

Families and Parenting

Some students spoke about how they had talked about their experiences with the dogs to members of their family, and how they had gained skills that they would share with their families once they were released:

"Definitely. I was speaking to my mum about that actually and I was telling her what I've been doing here and she was like 'you can come out and train my dog' and stuff like that. Everything I've kind of learned in here is useful."(P60:PI)

"I do think it will affect me quite a lot. Cos most of my aunties and all that have got dogs so I'll show them that I've learned something from being in the jail doing this. That's what I want to do when I get out there, show people that I've not wasted my time being in the jail."(P33:PI)

The interest that was shown by the students' family members in the work they were doing on the course provided a positive topic for conversation, as this student explains:

> "Aye, it helped me. It's helped me, 'cause I could tell my dad about it. Because we done it all… I made sure I really paid attention and then it gave me something to talk to them about."(P6:PI)

Furthermore, students also expressed a sense of achievement at committing to an activity which made their parents proud of them:

> "As well as helping me work with others as a team, being part of Paws for Progress brought me closer to my family too. It gave me something good to talk to them about, for a start. Then I felt like I was doing something to make them proud of me, the first time I could talk to them about something positive in years."(P8:PI)

> "My mam's really happy I'm doing this, that I'm sticking with it, she's fair proud of me."(P4:PMI)

There were also students taking part who were fathers themselves and felt that their learning would contribute towards safe management of dogs and children:

> "It is very useful, if you've got weans in the house you know what signs to look for with the dogs."(P49:PI)

Some students discussed how they would apply their understanding of how animals (including human-animals) learn and the benefits of a positive approach to teaching to their interactions with their young children:

> "It helps you think about things differently – I've got a wean, my wee man, he's two. There's a lot of it that's the same – you learn not to give them a row, it's better to encourage them for the good things, distract them away from doing something wrong. It's helped me, think about how I can reward him. Instead of shouting at him for doing something wrong, reward him when he's doing something right."(P11:PI)

> "It's helpful for families too, and for weans, raising kids – you approach things differently, think about it as teaching – positive reinforcement. And it stops you

> *just reacting to a situation – you take a step back and think about it*
>
> *instead."(P10:PI)*

Parenting skills were not specifically targeted within the course sessions, as only a relatively small percentage of the young men involved were parents when they took part. Given that the students made such positive connections as these, applying their learning to improve their parenting skills with their children, this suggests a potentially important aspect to consider when developing animal-assisted interventions that involve parents.

Peer support

Peer support was critical to the success of the dog training course. Students were quick to consider the importance of supporting each other to achieve their shared goal of helping the dogs:

> *"You're helping other people, doing the dog training, as well as helping the dogs. And it's not just about helping your dog. You notice changes in other people's dogs and you're involved in that, noticing what they like and don't like so everyone works together to make it easier for each other. So it's like you're helping them get better too."(P6:PI)*

The session format was adapted to include continuing students alongside new groups of students to support the running of the course. As the course developed, the role of continuing students expanded in response to feedback such as this, from a continuing student in the pilot stage:

> *"Obviously, I've fair enjoyed it with Tia, my dog, I love spending time with her. But I think I'd be able to fulfil my role a bit better if I had more sessions where I'm purely helping other people. I'd be happy to do that, give a bit more of a hand to other people. I think if you have one session a week where you can just focus on your own dog, and then work as a peer mentor or assistant for the other sessions, it would be good."(P4:PMI)*

Roles for continuing students were developed to maximise the support they could provide, and allow for opportunities for increased responsibilities on the course. The students demonstrated enthusiasm to work towards this increased responsibility, working firstly as assistants and progressing with training towards the role of peer

mentor. New students who joined subsequent courses responded positively to the support they received from the assistants and mentors, and commented on the helpful attitude that was shown towards them:

> *"I very much enjoyed it. Everybody is sociable and they go out their way to make conversation and you don't feel unwelcomed and stuff like that so. It's just a really all round good experience to have. I would advise everybody if they had the chance to jump at it. It's a good opportunity."(P60:PI)*

> *"Yes, I liked working in the group, it was a lot of fun, and the people I've been working with were very helpful when I first started. You could have a good laugh with them as well, but it was within reason at the same time."(P9:PI)*

The assistants and peer mentors also responded positively to the opportunity to progress their skills further in the advanced roles:

> *"After doing the first 8 weeks Rebecca then asked if I would like to stay on and become a peer mentor. I think this has helped me with being able to work better as part of a team, and taught me how to be more patient with other people." (P38:WS)*

> *"Working with Paws for Progress definitely helped me improve my team working skills, and encouraged me to help others. I felt really proud after I was asked to be a peer mentor – it felt like a big achievement."(P8:WS)*

The assistants and mentors demonstrated creative approaches to helping other students and dogs progress, and showed an awareness of how to apply the training skills and teaching methods they had learnt to help others:

> *"I was helping with Mojo as a stooge dog for Harley and Diesel, I worked Mojo as a stooge dog for them, to try and help them to be more calm around dogs. I think he's relatively good around other dogs. They done a bit of agility and that with Mojo nearby. Stuff like that really helped them."(P40:PMI)*

> *"Because the paperwork that's getting done, I done that all on the last course, I've just been helping other boys. They're asking me for advice on what goes into the paper work and I'm just, not giving the answers but giving them advice on what to put in."(P37:PMI)*

In supporting other students with their learning, the mentors demonstrated compassion, empathy and understanding, relating their skills teaching others to their own experiences on the dog training course:

> *"It's better than when you first come up cos like, when you first come up you don't know what to do and you're not sure and stuff like that. But when I first came up and I wasn't sure, and people were telling us, 'do this, do this, do that' I was like, that's good man. Obviously I'm in that same position now. I can teach them and if they learn just one thing out of like 10 things I teach them then that's good."(P40:PMI)*

> *"Everyone here is right into it, that's the thing, maybe it's the course that does it. But it seems like everyone has just got stuck right into it, proper focussed on it. And that's the thing, I think most of these folk would be totally lost without it. Like look around you, how many of these guys have got stuck right into it, and it's done a lot for them. It's constructive - like look at (another student) doing so well, doing so well with it. Gives them something really good to look forward to, takes their mind off their sentence for a wee while. So it has been good, it's been really good."(P4:PMI)*

Working together

Students responded particularly positively to the opportunities the course provided to work together, and spoke with great enthusiasm about their experiences:

> *"It's brilliant, I love the group, it's like a perfect group. It's brilliant, maybe it's because it's a good course. It's really good being in the group."(P10:PI))*

The dogs were seen to be pivotal in helping students relate to each other, bringing out the best in their handlers and encouraging the group to work together with a shared focus on meeting the dogs' needs:

> *"It's actually better than I expected. My attitude with everyone else that was down here, it changed once the dogs were in. You got to see the proper side of them, working like that, and it makes it easier to get on with everyone. At the start, everyone might muck around while they're waiting for the dogs to come in, but everyone knows how important it is not be like that with the dogs there, you*

can't be stressing them out so... Then you get to see the proper side of them, taking it seriously. Brings out the best in folk."(P5:PI)

"Once the dogs are there everyone just gets on with it. You see the best side of people when they're with their dog, and that makes it easier to talk to them."(P28:PI)

The students also recognised the need to work together as a team to meet their aim of helping the dogs progress:

"I thought it would've been hard, cos to begin with, the dogs don't know each other and they might not get on... But it's actually alright, they get used to being around each other quickly don't they, it's really good, better than I thought. And it's better when you get on with people in the group, we all work together to make it work, and that makes it 10 times easier."(P3:PI)

Students felt they gained interpersonal skills which helped them work together; building positive relationships with other students was common, helping each other progress and developing friendships:

"It's been an enjoyable course. It's been pleasant. It's made me build up better relationships, with the mentors in the class and then friendships with other people."(P53:PI)

"Yes, I found I'm a lot more calmer and relaxed. Better working in a group and not just thinking about myself. Got to think about others too."(P9:PI)

Moreover, these positive social aspects of their experiences were seen as a distinguishing feature of the dog training course. As the previous comments suggest, many students had struggled previously to work with others, to relate to other young people in the prison and had often felt isolated from their peers. The course appeared to develop a culture of working together effectively, which often had not been a feature of their previous experiences of participating in group work:

"It helps you with working in a group to build up relationships with boys and that. Know what I mean? Cos up the halls you don't usually, you wouldn't go and talk to a boy the way you do down here. Cos we can get on with each other, work together, it's a good group. So it's good."(P38:PI)

"It's different. Decent group. Usually you get a group where you've got a few good people then you've got idiots or people you don't like. This one, everybody seems to get on with it and get a laugh and nobody bothers anybody. Just get on with it and cheer each other up. Keep the dog a safe distance and all that. Get on with it. I was surprised. I wasn't expecting it to be like, just come down and be like that - but I came down here and everybody's alright, makes it easier."(P51:PI)

This feeling of belonging to a positive social group, being able to enjoy their interactions with dogs, while enjoying working together and avoiding conflict, was important to the students. Interestingly, this was frequently related to their commitment to the work they were doing with the dogs, with students emphasising that whilst they would enjoy themselves, they all understood the importance of focussing on the dogs` needs during their sessions together and of taking their responsibilities seriously:

"The course is, I don't know. Everybody's said it that's been up here or people that's heard about it have says that's the best work party that's been in Polmont. This is 10 times, 20 times better than any work party I've been at so. I don't know, it's a good atmosphere as well. I mean it's not just working with the dogs, it's a good laugh and that we have. Everybody gets on with everybody. Obviously we have a joke and a laugh and that and it's all fun and games. But obviously when we get the dogs and harnesses on, everybody just gets his serious head on and we can do stuff. Get the head down."(P40:PMI)

Communication skills

Learning to communicate more effectively with others was an important skill that students felt they had gained from the course. Gaining the confidence to speak in front of others was often expressed as a valuable aspect:

"Aye. I communicate with people better. So I'm happier doing it."(P66:PI)

"I was quite quiet when I first came down but now that I've got to know people I'm speaking out a bit more. More confident."(P41:PI)

Students also felt they gained skills in listening to others, which also helped their ability to work together and develop positive relationships:

"Aye. Working in a group together was good, it was fun. Sometimes it was annoying at first, with other folk, too many people talking at once and you can't get your ideas across. But once you learn how, and people listen to you, it's much better. And then you're much more able to listen to other people's thoughts, sometimes they've got the same idea as you too, and then it doesn't need to be difficult."(P6:PI)

"Aye I've learned when to just calm down, man. Listen and pay attention, cos I like doing what I'm doing."(P46:PI)

Communicating more effectively helped students gain confidence, and as their confidence in their abilities increased, so did their enjoyment of working together with their peers:

"I get on better with other people. Now I can put my point across a lot better. I feel more comfortable working with other people. Now it's something that I am really good at, I enjoy it."(P10:PMI)

Improved skills

In 66 (85%) interviews, students described improvements to their skills through their experiences on the course. 47 (60%) responses related these improvements to education or learning, while 50 (64%) related the improvements to employability skills.

Education or learning

Despite the frequently negative previous experiences of education discussed by the young men, they enthused about the learning opportunities on the course. The variety and the relevance of their learning to the students' interests were important:

"I think this is the only work party where you're actually learning about stuff. Every other work party I've been to, same stuff every day. Here you're doing different things every day."(P56:PI)

"I found it very useful, in the way that I've been able to better myself, and will be able use the learning, and things we've been working on, on the outside too."(P9:PI)

"Should be good to give other people advice about something I've learned in here. I never really thought coming in to the jail I'd learn and have an experience like this but I've actually quite enjoyed it for the simple fact that, working with the dogs and learning new things."(P60:PI)

Part of the variety was provided by the speakers who visited from external organisations, to discuss their work with animals. Students were enthusiastic about the opportunity to learn from these sessions, and also commented on the opportunity this provided for them to demonstrate their abilities to others:

"I think Alasdair and Fran from Blair Drummond Safari Park were my favourites as I always found their talks both fun and interesting. On the other hand, I also really enjoyed our visits from Phyllis and her guide dog Tyler, I found her very brave and inspiring."(P57:PI)

"I think it actually gives folk a wee bit of a shock at first, when they see us differently, see what we actually can do. It's like the folk who come in (external speakers), I don't think they expect it at first, to get the kind of questions asked, to get the kind of focus and attention that we give them. Probably they expect to come in at first and think it'll be a farce trying to teach us, but they haven't had that. It's been really really good."(P6:PMI)

Students were keen to emphasise that their enjoyment of the training sessions was critical to their learning experience. As the course developed, it was clearly important that the educational qualifications were embedded within the learning experiences of the students on the course, and not perceived as entirely separate from their experiences with the dogs:

"Not only are you learning new things you are having a good time while you're doing it so. I think that's maybe one of the biggest points. It's having that fun time, cos if you're having a good fun time then you have a good time doing it so you learn. I would recommend it for anybody else."(P60:PI)

"Because this, you enjoy yourself while you do it even though we do a lot of work and eh, qualifications and that, we enjoy ourselves doing that, knowing that we're going to be seeing the dogs and that after it too."(P69:PI)

Even when the written work was challenging for students, they recognised that their abilities had improved, and felt a sense of achievement from engaging in learning and improving their communication skills:

"The paperwork sometimes, I find that quite hard. But it's good. I've never wrote as much in my full life. This is the only time I've done writing. I don't do writing anywhere else. Down here's helped me with writing. See how we do so much writing? I'm always asking people how to spell things, they're telling me. I've registered, it's came in my head and now my spelling is better. That's good as well. I write more too. It's helped my writing and that as well down here."(P38:PI)

"It's helping me with reading and writing as well, getting to express myself in the writing, you know, the stuff I'm not saying, I get the chance to write all that down, which I find a lot easier now anyway. So it's definitely been good."(P6:PI)

In addition to expressing how their communication skills improved as a result of enjoying their work, students also frequently commented on how they felt their ability to actually learn had changed:

"Aye, enjoying learning. It's made it a lot easier and better for me. And I suppose then you could take skills from here and use it in other things."(P54:PI)

"Aye I learn lot better man. My spelling and my writing and all that has got a lot better as well cos I can think in my head and all that." (P12:PI)

"I enjoyed the written work we were asked to complete as it really helped me to improve my reading, writing and spelling. During my time on the course I received a lot of positive feedback about my written work as well as the training I was doing with my dog. This really helped my confidence which is something I was certainly lacking before. When I think about it, Paws for Progress did so much for me in such a short time. Not only did it help me change my behaviour for the better, it also helped me to improve my skills."(P4:WS)

The encouragement that students were given for making progress, focussing on their strengths and building their confidence in a learning environment, was appreciated by many of the participants. This positive approach to teaching on the course, which involved co-designing the course sessions with the students and was flexible to their different support needs, was recognised as important to their learning experience:

> *"I think one of the reasons the course was so good was because the staff were very kind and helpful, and encouraged everyone on the course."(P64:WS)*

> *"You get more help. You can understand it more. You're not getting told what to do, you're getting explained how to be better at it. It's not like shouting at you if you do something wrong. You just need to persist and keep practising."(P67:PI)*

The students' improved confidence to learn could then affect their future engagement with education, as one student who was transferred to an adult prison explained in a written statement:

> *"Unfortunately, when I arrived at adult prison there were no dog training courses or anything like it, in fact this is still the case. So I decided to add to qualifications I already achieved from Paws for Progress by attending the prison's education department. I have completed two creative writing modules, I'm currently working on my higher English with the view to starting Open University work in the summer and I have also just started a computing course. If it hadn't been for Paws for Progress, I would never have even thought about attending education classes, so thanks again to Rebecca who always believed in me and kept pushing me to do well."(P8:WS)*

Employment

The improved confidence in their abilities students gained from their experiences on the course was evident when discussing their skills, and was related to their ability to work both towards individual targets and goals and together as a team:

> *"You learn new skills. New stuff, no just about the dogs but about yourself. Your qualities, you don't even notice your qualities until you're asked or until you display them."(P40:PI)*

> *"Aye, it's good, cos you are working as part of group and just yourself as well, so you get both experiences and skills, if you know what I mean."(P51:PMI)*

The work involved was seen as challenging, but given their enjoyment of the activities and commitment to the project, this was described as a positive opportunity for students:

> *"I knew I was coming here to work my arse off basically – maybe other people might think you can come down here for a scratch, but it's definitely no like that. But that's what you want, there's no point in doing half a job, and that's what I like about it - it's challenging. I like stuff like that, getting right into it, definitely."(P3:PI)*

> *"And it's given something that I want to do outside, cos I've found something that I'm good at, that I can work towards and use on the outside as well. But the peer mentor role here has been good as well for that, giving me a wee bit more responsibility as well, so it been good. It's been a good wee challenge. I've fair enjoyed it."(P4:PMI)*

The support which was provided by Paws for Progress after students were released, which included facilitating volunteering and work experience placements, was seen as particularly helpful during the transition from prison to community; the opportunities for students to put their skills to good use through volunteering placements enabled students to continue developing their skills towards employment:

> *"Well this is the best one I've been on because I've been in hundreds of times, and every time I've got out nobody ever wants to help you but all the boys in here always get help when they go out. To do voluntary work eh, help with the CV building and all that stuff. So aye, better."(P70:PI)*

> *"Paws for Progress is fun as well as educational and the best part is that P4P doesn't stop when you get out of jail. It carries on outside with placements and job opportunities."(P28:WS)*

> *"I left Polmont in summer 2012 and since then have volunteered at Dogs Trust until I got a job as a trainee chef part time, I now have my own flat that I am*

> *renting and work full time as a chef for another restaurant in Glasgow."(P20:WS)*

Students spoke of being motivated towards the potential employment opportunities that could transpire after release, providing a positive focus for the future. Having awareness of the success previous students had found, through commitment to work experience opportunities and employment caring for dogs, increased students' belief in their ability to follow this path:

> *"Aye definitely useful, it's opened up doors for employment opportunities and self-employment, you know?"(P28:PI)*

> *"Well I think it's going to get us a job when I'm out isn't it? That's good. Something good to do when I'm out."(P15:PI)*

> *"Not only does it give you something constructive to do with your time in prison but you can also gain qualifications in subjects such as communications, numeracy, personal development and ICT. As well as all of this Paws for Progress provides work placements for almost all its students on release, some are even lucky enough to be offered jobs."(P8:WS)*

Students spoke of being inspired by their experience of enjoying working together within the prison, and aspired to continue this type of work in the future:

> *"It's an area of work I'm determined to get into when I get out. I'll make the most of the opportunities you've made available through the course. I know what it feels like now to have a job you look forward to going to in the morning – it's a very different feeling."(P4:PI)*

Self-efficacy

Bandura defined self-efficacy as one's belief in one's ability to succeed in specific situations. One's sense of self-efficacy can play a major role in how one approaches goals, tasks, and challenges. Across 67 (86%) of the interviews, students related their experiences at Paws for Progress to improved self-efficacy. Self-efficacy was seen to relate to the following sub themes: improvements to problem solving abilities (23; 29% of the interviews); the effects and value of thinking independently (30;38%);

improvements in confidence (41;53%); the sense of achievement gained by the students (54;69%) and the impact on their aspirations for the future (25;32%).

Problem solving

The students were clearly motivated to address issues and help the dogs improve their behaviour and wellbeing. Achieving this aim involved assessing each dog, and planning an individual training programme, setting targets and goals and measuring progress:

> *"I dunno, you want to help the dog because of what the dog's been through and what could have been its past experiences. You want to give a bit back to the dogs. Focus on target and a goal. Like goal settings."(P57:PI)*

> *"Working with Diesel. Just putting him through agility and all that, to learn to work together. Trying to get him used to being around other dogs and to be alright round people. Help him know that it's safe. That's good isn't it? Brilliant."(P38:PI)*

The students described the importance of understanding the individual dog and building a positive trusting relationship, in order to be able to effectively solve any behavioural problems:

> *"So it's pretty much, both aren't the same, but you can use one thing and it may work well with one dog, and you can try it with the other dog, but if they respond differently then you have to rethink. Once you get to know them, you work out what they like, and what they didn't like."(P6:PI)*

> *"Getting to see Harvey, build up a relationship with him, working with him and playing with him and all that. See at first, he didn't know how to listen at all, but it's all about getting to know him better."(P8:PI)*

The opportunity to translate from theory and planning into practice was valued by the students:

> *"The other stuff you just sit and talk about it, but with this you sit and talk about it then you actually go and do it. It's much better."(P34:PI)*

The problem solving skills the students gained, assessing situations and thinking carefully before addressing issues, could be applied to other contexts with increased confidence:

> *"Aye it's good, thinking that way, aye. It's helped us. To deal with other situations calmly. I think it has anyway."(P38:PI)*

> *"It's good that way. Thinking about what you're going to do and how you're going to do it - it gives you this sense of freedom, solving the problem yourself."(P11:PI)*

Thinking independently: Sense of autonomy

Students felt that participating in the course provided a sense of autonomy, through the opportunities for independent thought and decision making that came from planning their own progress:

> *"This is more free, more freedom and all that. It's alright. It's not something you have to do, it's something you want to do."(P15:PI)*

> *"It's thinking outside the box. Most of it at the prison is to do with inanimate objects and working with walls and wood and that. This is working with live things. It's better, builds your life experience."(P28:PI)*

Whilst staff members provided guidance to the students and offered assistance, emphasis was placed on students learning to set their own targets and assess their own progress rather than simply following instructions. This method of teaching was in contrast to many students' prior expectations. However, the resulting sense of autonomy was valued by the students, and appeared to lead to greater enjoyment, a sense of ownership and fuller appreciation of their achievements.

> *"I thought it was going to be things all lined up and do this and getting told what to do because that's what the jail is all about. They just try and tell you what to do. But you do your own thing really with the dogs. You plan it yourself. You don't just get told what to do and all that so. I didn't expect it to be what it was going to be. I thought it was going to be worse than it actually is."(P18:PI)*

Combined with the positive asset based approach that was taken to skill development, this opportunity to take responsibility for their own progress and to

use their skills to help others encouraged students, and gave them confidence in their own abilities. This was particularly the case for those who focussed on developing their skills to become peer mentors:

> *"It's like the peer mentors. Give them a chance, see what they can do, stand on their own two feet and show that they can be trusted, that they can do that kind of stuff. It's good to give someone that kind of responsibility as well."(P3:PI)*

> *"Aye, I think that's good. It's like me, see how I got so much out of this course, I think it's cos, like a lot of folk in here, I'm a hands on kind of person. give me something to work with and I'll do it. That's the good thing with how you do things, you give us a chance to get on with it and we get stuck right in. I think you get to see people shine a lot more, when they progress to getting their own roles, working to their strengths - cos I think they'll embrace that, getting a wee chance to do that theirselves."(P4:PMI)*

Confidence

The improved confidence which students gained in their abilities was particularly pertinent to their interactions with others. Through working together with the shared focus of helping the dogs, many students felt their interpersonal skills improved and their confidence increased as a result:

> *"Aye, you just meet people for like the first time you're like, not too confident in yourself and that. Then you get to know them, and you can like talk to them. Aye, coming out your shell a wee bit, that kind of thing."(P17:PI)*

> *"Aye, I'm more confident about like meeting new people, talking among a large group of people. Aye, my confidence is built up."(P24:PI)*

As the positive effects on the behaviour, wellbeing and futures of their canine charges were clearly visible, students described the positive feeling and sense of pride they felt as a result, and also commented on how this was not a feeling they had often experienced before:

> *"Sad to see them go man, but it's only for the best isn't it? I felt happy in myself as well aye. For doing the work for them and that. Know what I mean? It does feel good, feel really proud of yourself."(P21:PI)*

> *"Kia, aye a cracking wee dog. She was quite scared once she came in. I watched her trust us a lot more. Because like, obviously I've been good to her and that. I rewarded her when she had done good stuff and she learned. She learned more about stuff and then learned about manners, walking good on the lead. She's a lot better now and she's been rehomed. Felt good. I felt proud of myself. Proud of her as well for being fast at learning all the stuff she did."(P24:PI)*

The students noticed the effects of their improved confidence generally, considering how it would help them in the future, and how it increased their motivation and ability to take up further opportunities:

> *"I've noticed a few changes. Just noticed that I can do things that I put my head to. At first I thought I wouldn't really have made a difference, but I feel that I have made a bit of a difference. I got to work with a few of the boys and that so I made a good couple of pals too. Just, really liked the course in general. Really good."(P33:PI)*

> *"You get a lot of useful information and skills that could also help on the outside, such as patience, teamwork and the ability to read a dog's body language. I have learned a lot whilst attending this course and I am proud of what I achieved."(P54:WS)*

> *"When I first came down to the course I was quiet, kept myself to myself but as the weeks went by I started to come out my shell and I was able to work as part of a group. Since leaving the prison I got help from Becca with doing my CV and I am now at college doing gardening. I would say that it gave me the confidence to go ahead and do this."(P41:WS)*

Sense of achievement

For many students, their favourite aspect of the course was the sense of achievement they gained from seeing differences in their dog's behaviour resulting from their training:

> *"Seeing a difference in the dog from the start to the end just knowing it was you that made a difference. You kind of feel good for yourself cos you feel like you've really achieved something."(P60:PI)*

"The training. Knowing that he sat nicely when people came to meet him at the kennels made me feel good. Before he used to jump up on people and all that. Obviously people he's just met. But I trained him, he learnt manners. Aye that was my achievement but that wasn't just my achievement. My achievement was that I helped him getting rehomed, that was my achievement."(P20:PI)

As explained above, for many students the greatest achievement was when a dog they had worked with was successfully rehomed. Their awareness of how their efforts had helped their dog combined with knowing the dog was now going to have a happier new future was important:

"Aye I've really enjoyed it so I have. I felt that I've made a difference with the dogs if you know what I mean. Like, I've already rehomed 3 dogs so it's been a good experience and that. Quite pleased with what I've done. Feels like I've accomplished something for a change, know what I mean? Just, good seeing the dogs leave. You feel happy when they're away to a new home."(P33:PI)

The sense that the students had something positive to offer, having developed the ability to teach and provide help to others, was valued by students as a worthwhile accomplishment:

"Seeing the difference in the dog, from the start and then later on, it's good, it's a good feeling. Knowing you taught them, you did that. It's brilliant, to get that sense of accomplishment, it's really good."(P11:PI)

Achievements with the dogs were often described in parallel with the students' own achievements, reflecting the positive progress in their own behaviour and development:

"I think that seeing how easy my dog changed his behaviour had a huge positive impact on helping me change mine… My confidence also improved greatly during my time on the course and I think was largely due to the positive comments and praise I got for anything good that I done. Looking back now, I feel like a different person than the one I was when I arrived at Polmont, so thank you Paws for Progress for helping me to change and become a better person."(P8:WS)

Aspirations for the future

Following their participation in Paws for Progress, students described thinking more positively about the future:

> *"I think it made me grow up a bit and look to the future and see what I want to do."(P18:PI)*

> *"I'm more… considering my future and looking forward to things and that, sounds good."(P15:PI)*

Students explained how they felt motivated to follow up the potential opportunities after release, aspiring to work with dogs in future and stay out of prison:

> *"It's a good course, a really good course. I hope it keeps doing well. I definitely want to follow it up when I get out. Hopefully there might be a chance for me to get involved in this, help dogs, it's a project for me when I get out, and that will be brilliant."(P4:PI)*

> *"Aye, it's good cos I'll keep out the jail and I'll get to work with dogs. I've always wanted to work with dogs."(P20:PI)*

However, their aspirations were not limited to their own individual prospects. Student feedback, from development ideas to emphasising the importance of Paws for Progress continuing, resulted in Paws for Progress becoming a sustainable full time programme at the YOI.

> *"I think that Paws for Progress has been good for me and Polmont and all the lads who have attended. I think it's important that it continues onto the future."(P38:WS)*

> *"It helps dogs be rehomed and they get better with training. I think Paws for Progress should keep going, so more dogs can be helped to find a good family. I think it should go to more jails, so more people can learn training skills and more dogs can be helped."(P42:WS)*

Inspired by their experiences on the Paws for Progress course, students extended compassion and empathy to others held in prisons, detailing their aspirations for what Paws could achieve in the future:

"Try to get this - you know, after the two years starting out here, you can really do something with this. You know, this would be great for lifers, really really good. Like guys from the open as well, they could be doing this to their and others advantage. It could be good for more than just the rescue dogs, think about stuff like the Guide Dogs as well. So hopefully you'll be able to set something up like that too. See how it goes, eh?"(P4:PMI)

"As well as seeing Paws for Progress installed as a permanent full time programme at Polmont it would be great to see it expanded to other prisons across Scotland. As Polmont is Scotland's only prison for young offenders it has people serving a wide range of sentences, some as little as a week on remand to some serving life sentences, whereas adult prisons in Scotland tend to be categorised by length of prison sentence. This would be an advantage for Paws for Progress as you could tailor different programmes or courses to different prisons. For example, a long term prison would be a good place to set up a programme for training assistance or guide dogs as this takes a lot of time to do and the guys there have a lot of time to do it in. In a short term prison you could set up something similar to Polmont where the prisoners train rescue dogs for rehoming.

Again, these programmes would be something that would benefit everyone involved. The number of dogs being successfully rehomed would increase, freeing up space in rehoming centres. More jobs would be created, it would increase education and learning within prisons, and it could help reduce reoffending. It would also be a huge help to the charities who train assistance and guide dogs and to the people that require them, as more dogs can be trained quicker and cheaper."(P8:WS)

Some students emphasised the importance of programmes aimed at preventing young people from entering the prison system, again demonstrating their compassion and desire for others to benefit from such programmes in schools and communities:

"I think it would be a good idea for this programme to go to other jails and secure units, and maybe if I was given the chance to do a course like this I may have never ended up taking the path that I did and ended up in prison."(P38:WS)

"As well as expanding Paws for Progress across other prisons I think it would be a brilliant idea to target young people before they go to prison by setting up dog training programmes in schools or youth centres. Personally, I honestly believe that if I had known about Paws for Progress before I came to prison, I would not be here now."(P8:WS)

Some of the students linked the further development of Paws for Progress to their own prospects in the future, aspiring to help other young people by providing a positive role model, with a sense of pride regarding their own achievement, and hope to use this to provide inspiration to others:

"Only that I hope I can contribute to this more again in the future. I told my mum all about it, she's fair chuffed with me as well, she's really happy about what I'm doing with this. I think it would be good to come back, further down the line, be able to say to lads or folk that are doing it - like the guy who comes into the Link Centre, who was inside himself before and now comes to talk to the YOs - you can say, I've been in your position, I know how it feels. But I've done something with this, made something of myself. So it's all looking on the up from here."(P4:PMI)

Charitable purpose

The charitable purpose of their work was evidently regarded as very important, with 68 (87%) of the interviews referring to the opportunity provided to do something for the benefit of others. In 52 (67%) of the interview sources this was related to teaching others and 55 (71%) related this to helping others.

Teaching others

As the students were responsible for training their dog, the course provided opportunity for the students to also be the teacher, which was clearly valued and enjoyed. Critically, this enjoyment was greatly enhanced by the charitable purpose of their teaching and students reported seeing the positive effects:

"We've been looking after the dogs, training them. Obviously to stay, wait. Basically manners you need for a dog to be safe outside. Wait so they don't get knocked down. Handling for first aid work. Teaching them basically to behave

well to help them get rehomed. Maybe started with an unsettled life and we rehabilitate them. Aye I loved it. Every bit of it."(P56:PI)

"I enjoyed everything really. Training them and watching the dog getting better. Watching dogs coming in and they're not good at things. They're not really learned but we learn the dogs good in here. We've taught them a lot, manners, to walk nice on the lead, to take food nicely and stuff like that."(P24:PI)

"Well, one the things I did in the dog training course was teach a dog to have more confidence in itself... to maybe feel better."(P6:PI)

Students spoke of the satisfaction they gained from teaching the dogs and from the changes they saw as a result. This validated the students' efforts, as it was clear that they were not only effective at teaching but also using these skills for a worthwhile purpose:

"Just noticing the difference you've made from the first day you meet the dog until when the dog leaves. Just the gradual steps involved. You start to notice them. You feel good about it as well. You feel happy with yourself. That you're teaching an animal how to do the basics."(P33:PI)

"Just seeing Laurence coming in the way he was and then the way he's leaving. He's learned a lot. I've trained him, taught him a lot. I enjoy seeing that I've got something to give to a dog."(P36:PI)

Students frequently spoke about methods of teaching, with emphasis on what they had learnt about positive reinforcement training and how to employ it effectively. Many students recognised that effective teaching involves learning on the part of the teacher:

"Cos if I get a new dog when I'm outside, it helps you teach them. You can train it from when it's just a pup and all that. You learn things, what not to do to them and what to do. Like before I'd usually shout at a dog if it done something wrong. I'd shout at it probably. You don't do that cos it can make it scared of you. There's better ways of teaching." (P30:PI)

"You think, you get them to do things by getting angry and giving them a row. But we're learning, we're learning it's not the best way. We're learning to think

about how we can ignore things, not reward it if you don't want it... (the behaviour)... walk away from it if it gets too much. Give it a rest for a few minutes and then go back to it, make it easier and try again. I'd have never done it, thinking about training as rewarding in that way."(P10:PI)

"I enjoyed teaching the dog new things and the dog teaching me new things."(P20:PI)

Students were keen to use their skills to teach other people what they have learned, from other students on the course to their families and children outside:

"I'm just going to basically teach people what to do with their dogs and that. Just give them a bit of a heads up - you're maybe doing this wrong but you can do it, do these wee steps to make it better. So I think it's a good advantage and I'm really happy with what I've been doing."(P33:PI)

"I'm really looking forward to teaching my dogs, using the stuff I've learnt down here to teach them to calm down. Especially so it works now I have my wee man when I get back out. And I feel more like I can teach my wean about it too."(P11:PI)

For many students, the sense of accomplishment gained from teaching others and seeing them achieve, whilst recognising that they were individually responsible for the progress made, was the best aspect of participating in Paws for Progress:

"Even apart from the qualifications and certificates we get at Paws for Progress, we get something more than that. It's the sense of accomplishment, when you've taught something, even just one thing. Whether you've taught your dog or you've helped another student, you feel like you achieved a real goal. And when my dog achieves something, well then I'm really happy, because I know that dog is one step closer to getting a home."(P40:PI)

Helping others

The opportunity to help others was so critical to the students' positive experiences, that seeing the dogs make progress appeared to outweigh the students' own progress in most cases:

"I enjoy it all basically. The bit I enjoy the most is like, not just me but when the dog achieves something. When the dog passes his APDT Good Companion Award. If he completes that I'll be happy. When the dog achieves something it's one step closer to getting a home."(P57:PI)

"I would say probably the best bit was completing my Good Companion Award with my dog. It also means that he's a good dog and it's a step forward to everyone seeing that the dog is a loyal, good companion."(P53:PI)

The feeling that what they were doing to help the dogs had a positive impact and that they personally could 'make a difference' was frequently emphasised as important. It also seemed that one of the best aspects of the service model used by Paws for Progress was that it helped both the students and the dogs and was mutually beneficial:

"I think Paws for Progress should continue because it rehabilitates the dogs and helps rehome them. We are also learning to be patient and calm. It is also good to know that we are making a difference to the dogs' lives."(P59:WS)

"I would say Paws for Progress is a very successful project as it gives prisoners a 2nd chance to gain some qualifications and also gives the dogs a better chance of getting rehomed."(P30:PI)

Students considered the extent of the difference that they were making to the dogs, not only when they were directly involved in affecting their behaviour, but also regarding their welfare and prospects for the future:

"Aye, definitely. And it helps the dogs get rehomed. Like see Ollie, it was clear, it helped him get rehomed faster than it would have. And see cos they get trained up, there's less chance of them getting brought back too, cos they'll be better behaved and that too. It's good then, isn't it?"(P3:PI)

"The dogs that are on the course also benefit greatly from taking part. They receive one to one training and get to socialise with people and other dogs more than they would normally staying at the rehoming centre. And due to the stimulation they get from being on the course, this helps make them less stressed while back at their kennels. All of which improves their chances of being

successfully rehomed so everyone involved in the training programme is a
winner."(P28:PI)

The non-confrontational nature of their activities, combined with the positive
response of the dogs to human interaction and affection, provided an outlet for the
students in caring and helping others. The students were committed to continuing to
help others in other contexts, and were passionate about using their skills for such a
worthwhile goal:

"I enjoyed collecting donations for the dog charities as I wanted to give back to
them and dogs, for all the help we'd been given. After finishing the training
course, for the first time in my life I knew what I wanted to do with the rest of it –
work with and help animals."(P8:WS)

"It would be good for you to get more help too, you know, split the work you do a
wee bit, divide it! And because it's such a good course, it wouldn't bother me in
the slightest if everything I was doing was voluntary. Cos, if I was going to be
getting so much out of doing this, I'd like to feel I was giving other guys a chance
to get something out of it and be involved as well. It would be just as rewarding
working with the dogs as it would with the other boys as well. It's a reward -
seeing boys getting jobs out of this, it's just as much of a reward as seeing dogs
get rehomed, you know what I mean? It would be good to have guys who've been
through this, who have done well out of this, having a chance to be a role model
for others coming through as well."(P4:PMI)

Many students recognised the importance of engaging with opportunities to help
others for their own personal development. For some students, giving of themselves
to help others was not something they were accustomed to prioritising before
attending the course. When considering how opportunities to give to others could
help those who are serving long term sentences, it was recognised that 'giving' as a
form of reparation was an important part of rehabilitation for offenders.

"It's good to see the change in the dog. But when you first get your dog, it doesn't
know nothing, then when you work with it you can see progress and all that. It's
not easy but it's good. It's good to see that you're helping a dog that's came from
nothing. I've never done nothing to help anybody in my life, so when I do this it

makes me feel alright cos I'm doing something good. When I don't usually."(P38:PI)

"It's gonna be good, constructive stuff for folk, and that is important. Cos people are happy, they're happy to come to it, it's something they will really appreciate and it will be fulfilling for them, to do something positive. A lot of the things people do, it's purely for the parole board, ticking boxes. But imagine how that is for people serving long sentences. They've got nothing to work for. This would be really constructive for them, and something they want to do."(P4:PMI)

Motivation

The high level of motivation felt by the students was very apparent, with references in 76 (97%) of the interviews. This was related to high commitment and a sense of responsibility in 44 (56%), to the rewarding nature of their work in 61 (78%) and to a high level of enthusiasm for Paws for Progress in 70 (90%) of the interviews.

Commitment and responsibility

Students discussed challenges involved in the course and the responsibility they felt for the dogs, reporting that they were engaged and motivated to work hard in response.

"Aye, it was better than I expected. I didn't think you would be training them that much. It's a lot – it's full on. Responsible for everything the dog does. Learned a lot about it as well."(P52:PI)

"It was good, it was really really good. And I liked Shane, it was good that he was my first dog. He'll listen, he's well mannered. I like that, I really liked Shane. My second dog, now he was a bit of a handful. It was harder, although I still tried, I tried my hardest with him. But I really enjoyed it. And I'd do it all again, easily, happily."(P7:PI)

Motivated principally by their desire to help the dogs, students frequently reported being surprised at how hard they were working, how committed they were to their responsibilities, and how they felt they had progressed personally as a result:

"I think there was more to the course than I expected. Like when you explain it from the start it seems quite basic and all that. But like, you think you'll be able to get it and all that dead easy. But I think there was loads of wee difficult things in it. There was more to it, know what I mean? Challenging."(P32:PI)

"I just thought I changed a lot more than I'd have thought. I've definitely changed. I've matured a lot more, more responsible, aye."(P1:PI)

It appeared the students felt they were committed to this in a different way, when compared to other activities and their previous experiences:

"It's better than anything else here, I think. It's the only thing I enjoy, that I look forward to coming to. Everything else you're like, ugh, I need to go down there - but this, you're up and ready, waiting to come down first thing in the morning."(P10:PI)

"I've not finished anything I've done before. I start it, then I just ditch it. It doesn't interest me. I only do things that interest me. This is different. It's good."(P38:PI)

"I think Paws for Progress is the best. The staff are very good. It has helped me stay calm and stay out of trouble. It is the first work I have been fully committed to."(P62:WS)

"Aye. In fact see to be honest with you, I never expected anything. I expected to come up here, sit for a wee few weeks then patch it, go back to gym training again. But ended up sticking, it was good so…"(P20:PI)

As students took responsibility for their own progress, they were appreciative of the experiences available to them and concerned that other students should be responsible too, and make the most of the opportunities on offer.

"But see, the way it's going the now, I think it's fine the way it is now, it's brilliant. You're going about it the right way, step by step, cos a lot of folk need that. Working it like this, a new course every couple of months, it's there. If people really want to do it, they'll do it. And if people want to get the gains from doing it, it's there for them and they can do it."(P4:PI)

"The people you pick to bring on the course. Obviously like, once they come on they need to be really wanting to do the course. You need to be able to like, really want to do it. Not just coming on the course for the sake of it because you want to get out yourself or whatever. Because I think, I think you should really want to do it and put a lot of effort into it."(P24:PI)

The majority of students indicated that they wanted to continue their involvement with Paws for Progress beyond the initial course. For some students, this was related to their commitment to their work and their keenness to work towards additional responsibilities, which were seen to be beneficial for when they returned to the community:

"It's like the upcoming peer mentors, who will take over from me - they've got a lot to offer as well. It would be good to give them a wee chance at a bit of responsibility as well, you know, before they get out."(P4:PMI)

"As a peer mentor I was given more responsibilities, at the start of each session I would set the room out in preparation for the dogs arriving, and then tidy up and put everything away at the end. I would do my best to help the new students with their dogs and with any written work they were struggling with. I would also assist our teacher throughout the morning and help to ensure our sessions ran as smoothly as possible."(P8:WS)

While students were enthusiastic as they discussed their enjoyment of their work, it was also clear that they took their responsibilities seriously. This sometimes surprised the students as they observed their own and their peers' reactions; just as they were surprised at how much they enjoyed taking part:

"It's good, it's a good laugh. Loads of banter as well. But, I think like, you see a change in the boys. When the dogs come up, there's a kind of seriousness. Like we all go out and do what we do. I think everybody on the course knows how to be, working with dogs."(P40:PI)

"It's good because it's hands on, you get to be with a dog. You get a good laugh with all the boys but they take it seriously at the same time, it's not just a big laugh and a joke. It's something that everybody wants to do, everybody looks

> *forward to a Wednesday and a Friday when they're coming down and getting a*
> *dog, it's good. It's different but it's brilliant."(P27:PI)*

The students were keen to demonstrate their commitment to the project to others and to ensure that others were aware of the positive effects. The sense of ownership of the project and the responsibility to 'make it work' were described in relation to being offered an opportunity to show others the capability of the young men involved and of ex-offenders, and particularly what could be achieved through Paws for Progress.

> *"Polmont is perfect for Paws for Progress. As it has already been a huge success,*
> *it now has its own room within the prison, it has a prison officer dedicated to*
> *helping with the running of it every day and has all the required facilities. So*
> *much hard work has gone into making Paws for Progress the success that it is, it*
> *would be a huge shame to see it all come to an end."(P8:WS)*

> *"When visitors came in and all that, to see what we're doing. It's always been*
> *alright. See when the visitors come in, there's never been one thing that's gone*
> *wrong. The dogs are always alright and we're always alright. Show what we can*
> *do, what we can achieve."(P38:PMI)*

Rewarding

In over three quarters of the interviews, students discussed the rewarding nature of their experiences at Paws for Progress:

> *"See like when you get them to do something after spending so much time with*
> *them. Getting Marty to sit down and give you a paw and that. It's good, like when*
> *he first come on the course he done nothing. I enjoy that. Seeing an improvement*
> *in the dog. That's probably the best thing about it."(P14:PI)*

> *"The main dog I was working with was Blue and I loved that dog. The bonding*
> *between the both of us. The dog wanted to take his time and find different*
> *situations. It was a challenge. So yeah, it's good too. You're in the jail, you never*
> *think you're going to see a dog but come here, you can make a real difference to*
> *a dog."(P57:PI)*

Students explained the value of the autonomy gained from teaching:

> *"Training them. I enjoyed training them the most. Being able to say, I taught this dog to sit, that was me that done that. That was what I liked best."(P7:PI)*

> *"When you know they never used to be able to do that, and knowing that you've been able to train them to do it – that's what I liked best. Like Buddy. He's come on a lot since I started working with him, a lot better."(P37:PI)*

Students recognised the direct relationship between the effort invested and the rewarding return of progress for their dog. Students observed that although they were helping the dogs, they could see that the dogs gave even more back in response:

> *"Mojo's a brilliant wee dog. Easy to get on with, if you put enough effort in then he gives you it back so. You can't expect someone to go in and just start man handling. You just go in and show him a mutual understanding then it's all good."(P40:PI)*

> *"And if you give her even a wee bit of time, she gives you a lot more back. Show her that you care and that you're paying attention to her, and she'll do whatever you want her to do. Just need to be patient with her. She's a lovely dog, she's brilliant. Wouldn't change her for anything."(P12:PI)*

Students also felt their efforts were rewarded in their personal development, often indicating that the course had helped them and that they had a more positive view of themselves as a result of their work.

> *"This course has helped me realise how smart dogs are and how much progress it has – on you and the dogs. It helps me and I will now know how to treat and train dogs when I am lib'd from Polmont. It's been a fantastic course and it helps me to be patient and improve my skills."(P57:WS)*

> *"Paws for Progress has helped me to become a better person by understanding the way dogs think and the way they act around other people and dogs. And it feels like a real achievement when the dogs get rehomed."(P55:WS)*

Enthusiasm

Students reported feeling engaged and motivated, excited by their achievements, and so enthused by their experiences that they found it difficult to choose the best aspect of the course.

> *"Aye, definitely. See, like I was saying before, I would NEVER have known about how to click and treat a dog, or help it follow your hand, like that to sit. Stuff like that, it's just (notices the dog next to him sat at his signal) - good girl, see stuff like that! I do it without even realising now! That's brilliant."(P7:PI)*

> *"Paws for Progress has been excellent for me as I have learned lots of new skills and have gained qualifications. I now know when a dog is stressed and scared. I was also very impatient before I started but now I am patient as you have to be with the dogs. It has been a life changing experience for me and I love working with the dogs."(P30:WS)*

It appeared difficult for many students to consider ways of improving the course, which was often described as perfect in the current format. When comparing it to other programmes, all students favoured their experiences at Paws for Progress as one of the best activities they had experienced, with most students describing it as the best.

> *"It's the best it can be. It's phenomenal. Helped a lot of dogs. Helped a lot of people. Everything's up to scratch."(P57:PI)*

> *"I think it's spot on to be honest. Perfect the way it is the now. Just keep everything as it is, aye."(P10:PMI)*

> *"Keep up what you're doing that's the best thing. Aye, it's good. It's an excellent thing to do in a jail."(P17:PI)*

Many students wanted to emphasise the different ways in which the course benefitted all those involved, recommending it to the prison authorities for the future.

> *"I think Paws for Progress is a great project to be a part of. It gives prisoners good opportunities to get qualifications and certificates. It also gives the dogs that take part a better chance of getting rehomed. It's a work party that I*

personally enjoy coming to, I think this project should be an on-going thing!"(P54:WS)

Many students also wanted to express their gratitude for the positive experiences they had gained during the course, and recommended participating to their peers:

"Just my way of saying thanks for all your help when I was on the course, you give so much help to people and expect nothing in return, truly amazing. If I can do anything at all in the future let me know. More than happy to help, the course helped me a lot so I kinda owe youse. And the very least I can do is stay in touch, your course really helped me. Thanks again."(P34:WS)

"Working with Paws for Progress was a privilege and I am very grateful for the opportunity. I would highly recommend Paws for Progress to anyone who has a passion for helping animals and / or would like that second chance to change for the better."(P8:WS)

Positive effects

Descriptions of the positive effects which participating in the course had for the students were present in 76 (97%) of the interviews. This was attributed to improvements in their mood and wellbeing in 28 (36%), to the therapeutic nature of the programme (including bonding with the dogs) in 40 (51%), to the positive changes to the prison environment in 67 (86%) and to their enjoyment of participating in 76 (97%) of the interviews.

Improved mood and wellbeing

Students spoke about how helping the dogs contributed to their own feeling of happiness and provided a positive focus for their thoughts in an otherwise stressful environment:

"Aye, makes me happy, just basically being around the dogs and that. Just noticing the difference you've made from the first day you meet the dog until when the dog leaves. Just the gradual steps involved. You start to notice them. You feel good about it as well. You feel happy with yourself. That you're teaching an animal how to do the basics."(P33:PI)

> *"I think Paws for Progress is a positive thing that's interesting and good for Polmont. Paws for Progress should be available in different jails because it's like a bit of the outside that gives you more positive thoughts!"(P50:PI)*

Students reported improved wellbeing due to the positive work they were engaged in, which helped them feel they were making good use of time and skills, whilst also providing a positive focus and a pro-social cause they could identify with:

> *"Aye, it's been great. It's given me something really constructive to do with my time as well. I think that without this course I would've been lost. So it has, it's been a wee bit of a god send as well."(P4:PMI)*

> *"Aye it's good. Because you're up early, working hard and all that, you're tired and relaxed at night. You feel better."(P70:PI)*

> *"I feel a lot better, to be doing something more constructive. It's not like other work parties where you go and sit on your ass and you don't actually do that much! So this is proper, making good use of the time. And it's good knowing you're coming down to it, it's something to look forward to."(P3:PI)*

Being with the dogs was seen to have a therapeutic and calming effect, and therefore on occasion students who were particularly struggling in the prison environment were referred directly to the programme by prison staff and managers. The positive effects in these cases were apparent, as these students explain:

> *"And, I like working with dogs, I've always liked animals. I like being with the dogs. It makes me feel happier being down here. When I get down here, it makes me feel good. You know, much better than I did before."(P7:PI)*

> *"I very much did enjoy the course. Actually, I was at the cooks before here, so as soon as I came down here it kind of made me want to get out my bed and stuff like that cos I enjoyed it. Kind of gave me a good time just to relax and socialise. Having the dog there is very therapeutic. I've enjoyed it very much."(P60:PI)*

Therapeutic effects including bonding

Although the Paws for Progress course would not be considered as Animal Assisted Therapy (AAT), as it was not designed to work to a therapeutic goal, nor was it directly tackling offending behaviour as the prison programmes did, parallels were

drawn between the effects of participating on the course with prison programmes and therapy.

> *"I've done programmes but this was probably the best, and it's a work party. Different. Bit like a programme/work party isn't it? Good. More relaxed. Obviously you've still got the same rules and that but it doesn't feel like they're thrown right in your face. It's more laid back. But obviously you know if you fuck about you're not going to get away with it, so. It's good. The fact you get to go out and walk about as well, it's weird. This you just relax. You learn something."(P51:PI)*

> *"It's serious but at the same time you get a good laugh and that when you're down here. When you're doing programmes and that it's serious, you're always, there's no time for relaxing and all that. You're always like, dead serious all the time. But down here it's a more relaxed environment. You can enjoy it at the same time while you're working."(P32:PI)*

Students recognised the positive effects of human animal interaction; they appreciated the social connections, the positive atmosphere and the opportunities for caring and affection which were reciprocated by the dogs.

> *"I just enjoy it so I do. I enjoy seeing the dogs and that. Like seeing them running about, happy and that in here, cos they get on with people dead easily. Jet as well, he's a good dog, he cares about people. I've really enjoyed what I've been doing."(P33:PI)*

> *"I thought, I'm not really good with animals but I seem to have took to that no bad. Just like, teaching how to sit, stand, paw, taking her out on walks. Running with my dog. Cuddles and that. You don't think you're going to run about with the dog and give it cuddles and that. You sit down with the dog and the next minute the dog is jumping all over you. It's a laugh but, it makes you feel good."(P51:PI)*

Working with the dogs was seen to be calming and relaxing, providing quieter one to one time as well as the socialising in the group:

> *"Yeah you get to relax and you get to spend time with the dog. Get bits of one to one. Sometimes it's useful stuff in the other programmes, but there's maybe a*

group of 7/8 in the class and a tutor so you don't really get a bit of one to one. Makes it good in here that you can get a bit of time to yourself."(P57:PI)

"I enjoyed it best in the kennel - in the booths. Getting your own one to one time, no distractions. Just basically bonding with the dog."(P30:PI)

Working consistently and positively with the dogs provided opportunity for the students to build positive trusting relationships with their canine charges:

"The dog became more confident with me. When I first got him, he was unsure a bit. You just need to keep learning how to do things and that. Letting him know he's alright. He can trust you."(P67:PI)

"The best bit... Just bonding with them man, getting to know them and that. When they first come in they're no sure know what I mean? But when you get to know them man, they're all good dogs."(P21:PI)

"Definitely. I'd been brought up with dogs but I never really thought about behaviour, feelings, stuff like that. So basically when I get out I'll just show some of the qualities I've learned in here and just try and put it into my own dogs. I think I'm going to bond a lot more with dogs now I know how to train them and stuff like that."(P60:PI)

Students felt they developed close connections with their dogs, and recognised and appreciated the value of the bonding experience:

"What do I like best? That's a hard one. I think just sitting with her, when you've got time after the walk and the training, getting to know what she's like, it's that bit of bonding time with her. Just sitting the two of you, and she'll just sit there looking to you, you know what I mean?"(P12:PI)

"The personality of my dog was fantastic. I love the dog to bits. I enjoyed every day I was up here cos I knew I was going to see the dog. Got to bond with the dog. Gave him a wee bit more comfort. Taught him better skills. Great."(P57:PI)

Students described a sense of real connection with their dogs, of truly knowing each other and caring deeply about each other:

"Mojo was, I don't know, he was eh, maybe he's not as cool as other dogs or as cool looking, and things like that but I don't know man. It sounds cringe worthy but it's like the connection, know what I mean? He's a brilliant wee dog. I don't know, I wouldn't have changed him for any other dog for like, anything, know what I mean?"(P40:PMI)

"I liked Shane, I did like Shane the best, I think it was cos I got a real bond with him. It was - we just clicked, I suppose. And he really liked me I think. And I liked him. And he think he felt it. Think he felt the brotherly love!"(P7:PI)

"I think the best bit was probably when she started running. Just seeing that wee face going. That was hilarious. Thought it was funny just to sit in a certain bit with my trainer, but when I started telling everybody that's what she did, she sat next to me instead when I was training her. That dog had a sense of humour! All seriousness, at first she was dead reluctant and after a while she was dragging me along with enthusiasm instead of me trying to motivate her. Brilliant dog. Couldn't think of a better dog to be honest. See just cos it's the first one. Don't think it'd be the same again. See we click, it's funny but we do."(P51:PI)

Students described feeling a sense of developing a positive identity, a mutually beneficial bond, and mutual rehabilitation as a result.

"I think coming down to the dogs is really good. It made me feel good about myself, knowing I am helping a dog and I feel more calm knowing I've got my dogs as a friend. And not just rehabilitating to dogs, I think I'm getting rehabilitated as well from my point of view."(P60:WS)

"The dogs - they change the way you think and the way you act. They trust you, it's that mutual bond. You think you're helping them but they're helping you too."(P6:PI)

Change from institutionalised / prison environment

For many students, the opportunity to participate in the Paws for Progress course and experience human animal interaction was contrary to what they had expected to be available in a custodial environment. This was slightly more prevalent in the post course interviews than in the interviews with peer mentors.

"I think the course is perfect. I enjoy it very much. Just getting to come down and spend time with dogs and that. It's not really what you thought you'd get to do in prison."(P49:PI)

"It was a LOT better. See, even just that I was getting to work with a dog, that kind of thing. And in the jail! I just thought it was a lot, lot, better, so it was. I loved every bit of it! Just taking part."(P2:PI)

"It's been brilliant, it's been really, really good. And it's been something new, obviously not something you'd expect to get in a jail. So it was a golden opportunity to be taken and I'm really glad I got picked to do it."(P4:PI)

The course was considered to be different from other activities available in the prison; particularly the interaction, the variety of the activities in the training sessions, and the consistent opportunities to learn, make progress and achieve:

"Naw, it's good. It's alright, you're not sitting listening to somebody talking. Or just sitting writing or that. You're just doing a bit of everything, getting skills, achieving stuff."(P43:PI)

"This is probably the best course I've done. I'm not just saying that, it is. Everything else, see if you go to a work party or if you go to education you're doing the same thing every week but in here sometimes you're doing similar things but other times you're getting a dog every week and getting the dog to do something new."(P14:PI)

For some of the students, this was a novel experience in terms of engaging with prison activities:

"I haven't done a lot of other programmes or courses while I've been here, but I find this to be the best thing that I've done in here. It's different, and it's very useful."(P26:PI)

"Aye, I've enjoyed it. It's the best. It's the only thing I've liked, that I've stuck with. I'd do anything to be kept on it too."(P8:PI)

Many students reported that it was different from anything they had ever experienced:

"It's something different. I like this, know what I mean? It's something different. This is different, see cos I've never done this outside or nothing, it's different so I like it. I like this cos it's something I've never done before. I like working with dogs and that. It's good."(P38:PI)

"Well ah think Paws for Progress is good because it's different. It also gives you a chance to learn new things. I think the best thing about this programme is that you get to train a dog to do what it's told like sit, paws or tricks! Paws for Progress should be available in more jails and in more communities."(P51:WS)

The presence of the dogs and the varied activities, including spending time outdoors, was seen to provide some normalisation to the institutional environment, and a sense of freedom despite the custodial security:

"I think it's a good work party to have because it gives you a wee bit of a sense, not of freedom as such, but just to walk about with the dog and that. Gives you a sense of being outside again without actual being on the other side of the wall. A lot of people benefit from it. When people get out the jail they'll maybe get a dog and that and know what to do. Or if they ever notice a dog being neglected and that then they can stick up for it and that. So I really think it is a good thing to have it as a work party. People are benefitting from it."(P33:PI)

"It's a different thing seeing the dogs when you're in the jail cos it gives you a wee sense of being outside if you know what I mean. It's really good, I enjoyed it so much."(P44:PI)

The sense of autonomy and independence provided through their experiences on the course were valued; while diverse, these experiences were seen to be more effective in preparing the students for their return to the community, and helped build the skills and confidence needed to approach employment opportunities in new environments.

"Aye. Cos it's working with all the dogs and all that and going into an environment I've no been in so. Obviously cos I'm in prison I'm used to it, it's my environment. But when people come in they are basically coming into our house so we don't really bother. But going outside and going into a new environment, I thought that would be a bit weird cos obviously you've not got people telling you

all the time - you can't go certain places, you can't do this, you can't do that. You've not got an officer walking about with you telling you what to do when you're trying to train the dogs so it's a bit different."(P20:PI)

"It's much better than all of that (other work parties). Working with the dogs, thinking for your self - it's good, it's good that way, working out what to do for them yourself. It's a bit of freedom. A feeling of what it's like out there. Some people have been banged up for ages and we're not used to that."(P11:PI)

Enjoyment

All of the students interviewed reported enjoying the course, and throughout the interviews, students related their enjoyment to their positive experiences and engagement, enhanced even further by the dogs' mutual enjoyment of their interactions:

"Aye it's been brilliant, aye, it's a good laugh and that as well. I enjoyed the obstacle courses and that. Doing that, it's a good laugh and that with the other boys and the dogs really enjoy it so, aye."(P17:PI)

"I enjoyed working with the dogs. I enjoyed teaching them how to do tricks and obviously learning how to be patient with dogs and just taking your time. The clicker training and all stuff like that. I just enjoyed all of it."(P18:PI)

"Aye, I've thoroughly enjoyed it. Aye I've enjoyed it, very much. Just being with dogs, working with them in general. Just energetic bundles of life eh?"(P28:PI)

The variety of the activities also enhanced the students' enjoyment, with many students finding it difficult to choose which aspect of the course they liked best.

"I've done a full course now. I enjoyed the people from the zoo, the vets and the people from the SSPCA coming in. I enjoyed it all."(P59:PI)

"I dunno, I thought we were just coming down, taking the dog out but no that we were doing various stuff. We're not just out with the dog every day, we're watching videos or other folk having dogs speaking to us. Better than what I thought anyway, more enjoyable."(P56:PI)

"Paws for Progress is the best work party in Polmont because every day is different and it is really enjoyable."(P28:WS)

The positive social interaction was often central to the students' enjoyment; working together was seen to be fun and enjoyable, whilst also constructive to their progress. Students showed mutual respect to their peers and staff, and described their ability to work responsibly as a team whilst also enjoying the experience.

"Aye I really enjoyed it. I enjoyed working in a group. I think it brought me out myself more."(P63:PI)

"It's been good working in the group too, it's a laugh at times, we enjoy it but really, everyone gets on, everyone works hard."(P12:PI)

"Brilliant. Now I know all them down here as well. Some laugh down here. It's not as if it's like, strict or shite or that. You get on with them, they get on with you and we all do what you tell us. It's alright, it's enjoyable."(P54:PI)

The students' enjoyment of the course was integral to their learning experience and development of skills, and was considered productive, aiding their progress.

"I liked Paws for Progress, because as well as learning and helping others it was always also a lot of fun and very enjoyable."(P8:WS)

"Yeah, I have really enjoyed it. It's been a good experience because it's something I've never actually done before. It's like actually working, working with dogs. Working with dogs and that. I've fair enjoyed it."(P2:PI)

The students' enjoyment also influenced the popularity of the course within the prison, as students promoted their positive experiences to their peers. Furthermore, enjoyment was key to their long term engagement and commitment:

"I think Paws for Progress is the best course. It's helped me to work as a team and stay calm and out of trouble. In addition the staff are very good and helpful towards us. I enjoy the course and so I hope to stay on and increase my skills even more."(P64:WS)

"I thoroughly enjoyed it. And I found it very useful, in the way that I've been able to better myself, and will be able use the learning, and things we've been working on, on the outside too."

Dogs

Whilst many previous quotes provided have related to dogs, the theme of dogs is not discussed directly in this chapter. The educational value of the programme in relation to dog welfare is described in Chapter 4 (Section 4d).

Section 4: Discussion

Summary of key findings in relation to aims

As shown in Table 5.4, evidence has been gathered from both qualitative and quantitative participant outcomes to evaluate the efficacy of Paws for Progress in meeting the programme's aims.

Table 5.4: Paws for Progress Aims: Related Qualitative and Quantitative Outcomes

Paws for Progress: Aims	Related Qualitative Outcomes	Related Quantitative Outcomes
a) improve behaviour	Emotional management (59% interviews). Impulsivity: Self-control and behaviour (62% of interviews).	Significantly reduced Disciplinary Reports. High percentages engaged in productive activity in long term.
b) increase educational engagement	Improved skills: Education or learning (60% of interviews). Motivation (97% interviews). Charitable purpose (87% interviews).	Significant increase in written assessment; substantial qualifications gained.
c) develop employability skills	Improved skills: Employment (64% interviews). Social impact: Working together (81% interviews). Motivation (97% interviews). Self-efficacy (96% interviews). Emotional management (59% interviews).	Significantly improved confidence in social competencies (AoN). Significant improvement on Interpersonal scale (BarOn EQi:S). High percentages engaged in productive activity in long term suggests enhanced employment prospects.
d) enhance well-being	Social: Peer support (55% interviews). Positive effects (97% of interviews). Charitable purpose (87% interviews). Self-efficacy (96% interviews). Motivation (97% interviews).	High levels of engagement demonstrated from a previously disengaged group (in Paws for Progress attendance, retention rates, and continued participant engagement in long term).

The response of participants to Paws for Progress was clearly positive; it was evident throughout the qualitative data analyses. When asked about their experiences on the course, all 66 participants (100%) responded that they had enjoyed participating and felt that the course had been useful to them, with 85% of participants articulating ways in which the course had been useful. When asked about whether they had noticed any changes in themselves as a result of participating, 65 (98.5%) participants indicated that they felt positive changes had occurred, with 95% of participants describing the changes they had recognised. It is also worth noting that

these participants were not equally positive about their previous experiences of engagement (Section 3a: Table 4.2).

All respondents spoke positively about their experiences working together in a group. 100% of participants also responded positively regarding their enjoyment of working with the dogs and their positive feelings about the dog(s) they had worked with. 100% of participants were emphatic about the how their learning would change the way they regarded and behaved towards dogs in the future, which has positive implications for dog welfare education. In collaboration with partnering organisations, Paws for Progress was responsive to suggestions for improvement to the course, and it was developed with a user led model of engagement. It is likely that this positive collaborative learning environment influenced the high levels of engagement and motivation expressed by participants. Thematic analyses identified eight key themes related to participant outcomes, which were each subdivided into two or more sub-themes; these were each grounded in examples and discussed in this Chapter. These key themes were: Emotional management (references in 59% of interviews); Impulsivity: Self-control and behaviour (62% of interviews); Social impact (83% of interviews); Improved skills (85% of interviews); Self-efficacy (86% of interviews); Charitable purpose (87% of interviews); Motivation (97% of interviews); and Positive effects (97% of interviews). This thematic analysis has highlighted the wide range of perceived benefits of Paws for Progress from the perspective of the participants, which are related to the programme aims in Table 5.4.

Whilst these are very positive results, it is also important to consider alternative or contradictory explanations. Each of the themes is referred to by the majority of participants but the themes were not represented to the same extent. Emotional management, and self-control and behaviour, were expressed by just under two thirds of participants in the initial post-test interviews. The improved skills subthemes; relating specifically to learning or employment were expressed by just over two thirds of participants. This suggests that not all of these perceived effects will be experienced equally by all participants. Although beyond the scope of the current study, examining the relationships between the themes would be an appropriate next stage in this analysis. It would be anticipated, for example, that highly prevalent themes such as charitable purpose and self-efficacy are strongly related; the opportunity to help others would intuitively appear to influence the sense

of achievement gained. It would also be of great interest to triangulate quantitative and qualitative outcomes in greater detail, and see, for example, whether the students who describe the most improved behaviour are those for whom the greatest quantitative improvements are noted in the reduced Disciplinary Reports received.

Whilst negative cases were explored in these data, negative aspects were rarely reported, and where found, were typically paired with a positive aspect of the same process (for example, the rehoming of a dog). The limited number of negative cases could be seen to be related to the researcher's proximity to the programme; perhaps participants did not want to describe negative programme experiences to programme staff. However, participants were vocal regarding their feelings in relation to the programme's development (for example, expressing the need for a dedicated training area during the pilot: 9/12 participants), which suggests they felt comfortable discussing issues with programme staff. It therefore appears more likely that, if participants did fail to mention additional negative aspects during interviews, this was because such aspects were negligible in comparison with their positive feelings about the experience (expressed by 100% of participants).

The important next step is to determine whether these positive experiences and perceptions of effects translate into improved outcomes for those involved, by triangulating the data with other sources of information. However, it is also important to consider general vs specific research tasks. While this study has been a valuable aspect of the research evaluation, it is not possible to generalise the findings broadly. The outcomes achieved are related to a specific type of HAI programme designed for a specific target group. It is therefore worth considering the strengths and weaknesses of the methodology employed, to assist the reader further in determining the relevance and generalizability of the findings (Elliot et al, 1999).

Methodological Strengths

This study used semi-structured interviews to gain an in-depth and detailed understanding of the experiences of young offenders participating in the Paws for Progress programme. Such methods provide rich data from participants, which can then be assessed to determine their relative importance by the frequency of expression of each of the themes in the participants' statements. Detailed background information on the participants who volunteered to participate in the study is

provided in Chapter 4 (Section 3a), situating the sample (for guidelines, see Elliot et al, 1999). When describing the data and interpretations, this study provides coherent examples which illustrate both the suitability of the themes derived from the analytical procedures and the understanding developed through their interpretation (grounding in examples). Credibility checks were provided by utilising the technique of 'peer debriefing'; a second analyst (not involved in the research) read the transcripts and identified very similar themes to the researcher (see Chapter 3, Section 4). The findings are presented clearly as a description of the participants' experiences (accomplishing specific research tasks) which are related to issues pertaining to offender rehabilitation and to the mechanisms involved in HAI in Chapter 6. Therefore, whilst this study may be of particular interest to those working in offender rehabilitation, it is also likely to resonate with a wide range of readers internationally.

<u>Limitations</u>

This study did not fulfil all of the guidelines provided to judge quality in qualitative research (Mays and Pope, 1995, 2000). Although it is a methodological strength that quantitative and qualitative results are triangulated, it would have strengthened the study further if there had been qualitative data formally gathered from different groups (other than programme participants), allowing triangulation of participants' perspectives with other perspectives, such as those of prison staff. The feasibility of this was explored (see Chapter 3; Section 4) but was not possible within the scope of this study. Respondent validation (in this case, discussing the researcher's account with participants to establish the level of correspondence) occasionally occurred informally (for example, discussing reports regarding participant perspectives of the programme with previous participants); this would have been worthy of formal processes, had time constraints not restricted this in practice. Reflexivity (sensitivity to ways in which the researcher / research process shaped the data) is also worthy of further consideration.

A good example of the need for reflexivity is found in Table 5.4, in which the theme charitable purpose is included as a theme related to engagement in education. It was apparent to the researcher from early in the programme development that participant engagement with education needed to be centred on the opportunity to

help the dogs (by developing a portfolio of information which could be used to promote the dogs for rehoming). The researcher's experiences as a practitioner therefore subsequently influenced her expectations regarding outcomes; these expectations in turn shaped the research process, which could be argued to mean that the researcher subsequently looked for evidence to support these expectations when reviewing the qualitative data. However, several processes were in place to counteract potential bias. Questions asked of participants were designed to be impartial and non-leading. Providing frequencies and percentages to describe the prevalence of each question response and theme in the data allows the reader to assess the appropriateness of the researcher's interpretation. Grounding data in examples similarly assists the reader to consider and judge the researcher's interpretation in relation to the data. Qualitative analysis involves an inductive process of reviewing data to identify general group beliefs and common experiences; this analysis often involves drawing on previous research and the researcher's observations and experiences during data collection to form expectations of anticipated outcomes, which are then explored in the data, to determine if they are supported by evidence. As such, whilst it is important to consider ways in which the researcher's experiences as a practitioner influenced the research process in this study, it is also worth recognising that it is relatively common for qualitative researchers to be similarly immersed in applied research, in order to better understand the participants' situations and perspectives and design the research appropriately.

Evaluate the logic model

The next step is to examine the data collected using quantitative and qualitative indicators to evaluate whether the logic model worked as planned. It is important to consider any areas which were less effective and the suitability of methods of measurement. This information is presented in Table 5.5: Logic model outcomes: Monitoring / Indicators, in which green text is used for indicators suggesting the anticipated outcome is supported by evidence; orange text is used for indicators where additional evidence / different measures are required; and red text for indicators suggesting no change occurred. While most indicators suggest the anticipated outcomes have been achieved, it is worth considering for each outcome whether the evidence was gathered from more than one source. For example, most

indicators of well-being were not measured quantitatively, and therefore supporting evidence comes from only one source. It is also worth noting that most long term indicators suggest further evidence or different methods of measurement are required. This reflects the difficulty assessing the extent of Paws for Progress' contribution in achieving long term outcomes, which is discussed further in Chapter 6, alongside a consideration of the strength of the evidence supporting the programme's efficacy and the relation of the outcomes to desistance. Next, the implications of the results discussed in Chapters 4 and 5 are considered further in Chapter 6. As the final chapter of the thesis, Chapter 6 discusses results and methodologies, and considers future directions for research. It will also consider the potential mechanisms involved, and relate this to programme features that are integral to success.

Table 5.5: Logic model outcomes: Monitoring / Indicators: Green text for indicators suggesting the anticipated outcome is supported by evidence; orange text for indicators where additional evidence / different measures are required; red text for indicators suggesting no change.

Outcomes and Monitoring / Indicators					
Short term	**Monitoring / Indicators**	**Medium term**	**Monitoring / Indicators**	**Long term**	**Monitoring / Indicators**
Students feel they have good relations with staff and volunteers	Programme records. Qualitative – Interview responses.	Students continue to engage with services and develop supportive relationships	Continued engagement with Paws. Qualitative – Interview responses.	Engagement with support post release	Support after release is recorded. Record continued engagement with Paws.
Students feel motivated to attend sessions	Programme records. Qualitative – Interview responses.	Students engage with education and gain qualifications	Written Assessment. Engagement from records. Qualifications achieved.	Engagement with volunteering opportunities	Engagement with volunteering from programme records.
Students gain communication skills and learn teamwork	Assessment of Needs (AoN) and EQi:S. Qualitative – Interview responses.	Students' responsibilities increase: mentoring and assisting	Continued engagement after completing initial course. Qualitative – Interview responses.		
Students gain sense of accomplishment and feel motivated to take up opportunities	Qualitative – Interview responses. Engagement with learning opportunities.	Students gain interpersonal skills and improved emotional management	Qualitative – Interview responses. AoN and EQi:S.	Enhanced employability	Status and Activity after release at 6 month, 1 year and 2 year follow up.
Students gain understanding of dogs and animal care	Qualitative – Interview. Written Assessment and coursework.	Increased empathy, kindness, nurturing and caring for others	Qualitative – Interview responses.	Enhanced engagement with further education	Status and Activity at 6 month, 1 year and 2 year follow up after beginning programme.
Therapeutic benefits of human-animal interaction: students' wellbeing improves	Qualitative – Interview and EQi:S.	Students have increased confidence in skills and capabilities	AoN, <mark>Rosenberg Self-esteem</mark> Qualitative – Interview responses.		
Students' attitudes, behaviour and aspirations change	Behaviour in Disciplinary Reports received. Qualitative – Interview responses.	Students change behaviour, development of pro-social attitudes and positive aspirations	Behaviour in Disciplinary Reports received. Qualitative – Interview responses.	Reduced reoffending by Paws for Progress students	Reconvictions resulting in returns to custody within 2 years of release.

Chapter 6 - General discussion and future directions

Summary

This chapter summarises the evidence gathered through the Logic model evaluation, demonstrating the efficacy of Paws for Progress in achieving the programme's aims; short, medium and long term outcomes indicate the benefits are far reaching. The methodologies employed in the evaluation are reviewed, and whilst there are some issues concerning their applicability and suitability, there are also key benefits for the approach taken. Programme features considered integral to success are identified, and related to criminal justice, reviewing their relevance to the process of desistance. The thesis ends with practical recommendations to inform the development of prison based dog training programmes and HAI services, and the contribution this research makes to our understanding of human animal interactions and interventions in criminal justice.

Section 1a: Paws for Progress: Unleashing Potential

The evidence provided indicates that Paws for Progress is effective in improving behaviour and wellbeing, enhancing engagement with education and improving employability skills.

Evaluating the evidence in relation to programme aims

a) Improve behaviour

The improved behaviour of participants generalised beyond the programme. The evidence from convergent quantitative and qualitative results, combined with a lack of improvement in behaviour for the Intervention Control Group suggests this is attributable to the effects of Paws for Progress. The high percentage engaged in productive activity in the long term suggests positive changes in behaviour were sustained.

b) Increase educational engagement

Strong convergent evidence is demonstrated from quantitative and qualitative sources. Substantial numbers of SQA qualifications in Core Skills were gained. Motivation to engage with education was initially derived from the students' determination to help the dogs in their care.

c) Develop employability skills

Convergent evidence was clearly demonstrated from qualitative and quantitative sources. There were methodological implications; there is a clear requirement for measures to be phrased appropriately and simpler response formats are required. Developing in-house monitoring tools which specifically explore the key variables as identified in the qualitative research (i.e. skills, social impact, motivation etc.) could provide an effective measure to quantify outcomes further.

d) Enhance well-being

The qualitative analysis in Chapter 5 clearly evidenced the positive impact of Paws for Progress for the participants' well-being. However, there were limited indicators of well-being measured quantitatively, and therefore most direct supporting evidence comes from only one source (participant interviews).

Section 1b: Summary: How the gaps identified in previous research have been addressed

Gap 1: Comprehensive description of processes of development and evaluation of the programme. The complexities of the Paws for Progress intervention have been described in detail, including the process of intervention development (Chapter 2) and the development of the evaluation (Chapter 3). In this Chapter, we consider the programme features which are integral to success (Section 3), relating this back to the literature reviewed throughout the early chapters of this thesis. Recommendations to guide the future research (Section 2) and development of PAPs (Section 4) are provided in this Chapter.

Gap 2: The Scottish context. This thesis has provided the first evaluation of a prison based dog training programme in the UK, providing a detailed account of its effectiveness in the Scottish context. Whilst comparisons of dog training programmes across different custodial contexts are important to begin to understand what features are universal and what makes them effective, the lack of detailed reporting of most studies described in the literature (see Table 1.1 in Chapter 1) currently limits meaningful comparisons. This thesis sets a benchmark for reporting such details, and the findings can be used in future comparisons of specific target groups and type of intervention in relation to the outcomes achieved. None-the-less there are some positive outcomes of dog training programmes in prisons which appear to be generally applicable and these are explored further in the current chapter (Section 3).

Gap 3: Comprehensive evaluation, systematic and controlled. This evaluation provides the first comprehensive quantitative analysis of short, medium and long term outcomes for Scottish young offenders serving custodial sentences (N=70) following participation in Paws for Progress. Using a mixed design with two control groups and triangulating quantitative and qualitative outcomes, the evaluation assessed the efficacy of the programme. As highlighted at the beginning of this section, convergent evidence demonstrates the programme's efficacy in achieving its aims. Systematic analyses of semi-structured interviews pre and post participation in the programme support findings from the quantitative analyses. Analyses of institutional behaviour, measured by Disciplinary Reports, educational progress measured by written assessments and qualifications, employability skills measured

by psychometric tests, and prisoner well-being all improved for participants, but such improvements were not shown by control groups. Paws for Progress positively impacts short and medium term outcomes and data on longer term outcomes also indicate the benefits are far reaching.

Gap 4: The wider context. By clearly relating programme aims to the outcomes achieved, and considering the contribution of Paws for Progress to future desistance from crime, the value and relevance of these findings are evident. The evaluation contributes to our understanding of effective methodologies in this applied context, which can be utilised to improve research practice in interventions in criminal justice and in human animal interaction. By clearly communicating each step of the 5 Step approach (1. Identify the problem; 2. Review the evidence; 3. Develop a logic model; 4. Identify indicators and monitor the logic model; 5. Evaluate the logic model) to development and evaluation, this thesis examines the likely contribution of Paws for Progress toward long term outcomes of participants whilst taking the wider context into account.

Gap 5: Assessing the impact for all programme participants, including the dogs.

Given that the dogs are essential to the success of the programme, the outcomes for participating dogs in Paws for Progress are also important in evaluating the programme's efficacy (Leonardi, Buchanan-Smith and Vick, in prep). The comprehensive quantitative analyses of dog behaviour and welfare pre and post programme participation showed improvements in both, with effects enduring back in the shelter kennel environment. Almost all (97%) participating dogs were successfully rehomed (128/132 dogs participating in Cycles 1-12).

Paws for Progress has a significantly positive effect on the dogs' performance in training, which will help the dogs interact positively with people and be more manageable. Dogs spent more time being relaxed and restful in the kennel, and less time engaged in negative behaviours. The significant increase in time interacting with a person suggests their sociability increased. There was a significant increase in desirable behaviour and a significant decrease in undesirable behaviour. Together, these results provide evidence for improved dog behaviour and welfare as a result of participating in Paws for Progress. The positive reinforcement training techniques employed are critical to the improved behaviour and welfare outcomes (Hiby et al,

2004; Rooney and Cowan, 2011). The value of the education in dog care and welfare most certainly has considerable implications for welfare of dogs beyond the programme; these positive effects may be even further reaching, as participants in turn educate others. This is explored further in the current Chapter, in consideration of the programme features integral to success (Section 3).

Section 2: Recommendations for future research

The primary constraint on this research was the need to simultaneously develop, deliver and evaluate the programme itself. There were promising alternative research methods that were considered impractical in practice, such as observational methods, systematically gathering feedback from prison staff and from graduates after release, and development of a specifically designed monitoring tool (see also Chapter 3, Section 4). Observational methods (for example, scoring the social interactions and cooperative behaviour in the group context) were explored as a potential measures but it was not possible for the researcher to use such measures while delivering the course. Such methods hold promise to inform our understanding mechanisms of change and would provide the opportunity to quantify some of the more qualitative measures (such as social support, pro-sociality) and behaviours related to wellbeing (e.g. by measuring changes in mood via facial expressions, or exploring the effects of oxytocin by examining bonding experiences between the dogs and humans). This could be more clearly related to the measurable benefits of human animal interaction identified in Chapter 1.

Gathering formal staff feedback would have strengthened the evaluation further; one to one interviews could have provided valuable insights into staff perceptions of the programme and could have been more feasible to achieve than the survey measure attempted. Whilst the original intention was to use a staff survey (describing individual participant's behaviour and progress) as a pre and post measure, it could have been more realistic to use interviews with a small (systematically selected) sample of prison staff, than attempt to communicate directly with all of the personal officers assigned to all participants pre and post-participation (N>70). Formally exploring the perspectives of programme graduates could have helped to determine the contribution they felt Paws for Progress made to long term outcomes, and again,

could be based on the response of a smaller randomly selected sample (e.g. N=20) to address practical constraints. The feedback provided by past participants was positive regarding the contribution of Paws for Progress to long term outcomes, but feedback was not gathered systematically in this study. Finally, development of a monitoring tool which relates specifically to Paws for Progress programme aims could have been more effective than attempting to refine existing measures (such as the BarOn EQi:S). Such a measure could take into account the issues encountered with language and response formats, and with positive impressions provided at pre-test, and through careful development of the instructions provided and the statement / response format, may be more successful in negating such issues.

However, while there were constraints, the simultaneous development, implementation and evaluation is also a key strength of this project. The ethnological approach of the researcher allowed dynamic feedback between the development and evaluation, responsiveness to feedback, and a positive rapport between the researcher, participants and staff. It also provided enhanced insight into the practical constraints of conducting research in this applied context, and a thorough understanding of the context for the young people involved. The integration of development, implementation and evaluation fits well with a logic model approach to development and evaluation, which can be considered as strengths of the programme and research; such an approach is recommended for future research in this area.

Control groups: Methodological issues

It is well accepted that control groups are integral to robust evaluations of the effect of an intervention (e.g. Kazdin, 2014). However, it is not easy to find suitable matched controls. Typically, a concern regarding utilising the waiting list as a control group is whether any intervention is likely to have an effect, when compared to no intervention at all. However, as very few participants attended other activities regularly prior to Paws for Progress, it is argued that for this study, 'No Intervention' represents 'Treatment as Usual.' Therefore, the progress of this Waiting List group has value when analysing changes. The Intervention Control Group was expected to have more credibility in regard to receiving an alternate intervention; however, the groups (Paws for Progress vs Intervention Control) differed on multiple key variables. Overall, the efficacy of this control group is limited by the practical and

ethical constraints precluding random allocation, and the inability to match participants on key variables. However, in this context, randomised control trials are not possible, nor are they practical or ethical; selection processes should aim to target those most at need, and it is recognised that HAI may not be beneficial for everyone, especially those who do not want to interact with an animal. The differences in programme aims, format and selection processes can be substantial and sample sizes too small to provide a truly meaningful comparison between interventions in this applied context. Furthermore, given the many factors which contribute to long term outcomes (see Chapter 2: Section 3), it is more applicable to consider the <u>contribution</u> which Paws for Progress makes towards long term outcomes and goals.

<u>The 5 Step approach: Criminal Justice and Behavioural Change</u>

The 5 Step approach takes constraints in applied research in this context into account; in the Logic Model, short and medium term measures are used to inform expectations for long term outcomes. However, this approach relies on making a series of assumptions, and it is essential that these assumptions are supported by evidence. It is important therefore to explore how the aims and outcomes achieved relate to improved longer term outcomes and desistance. Given the broad effects of Paws for Progress, it is likely that a holistic approach is fitting for such outcomes to be achieved; it is therefore vital that we consider the inputs and activities required. In applied research such as this, it is usually impossible to isolate specific elements of an intervention. However, identifying the elements that are essential or integral to attaining outcomes is desirable, to aid our understanding of the underlying mechanisms of change and provide hypotheses which can be tested outside the applied context of the programme. For example, it would have been very difficult to isolate the human animal interaction component in Paws for Progress given that the holistic nature of the programme was well known to the young people and the benefits of this holistic approach were apparent to prison management. Evaluation serves to both refine this programme and to allow information to be communicated clearly with others (with examples and measures to support the conclusions) to inform best practice in the sector. Then, we can consider how we might use this understanding to improve interventions for offenders and improve HAI services.

"It's not gonna turn everyone into a proper angel overnight…"

Too often in prison based animal programmes, inflated claims are not backed up by meaningful evidence or clear information (e.g. statements such as "no one who took part in one of our workshops has ever reoffended" do not indicate the nature of the evidence base on which such conclusions are based). This lack of a transparent evidence base is perceived to be a serious issue more widely in criminal justice (e.g. this was one of the triggers for the 'Using Evidence in Practice' event in 2015, hosted by the Scottish Government Justice Analytical Services and involving a consortium of agencies and funders); it can lead to an expectation for service evaluations to provide evidence of a reduction in reoffending. However, this is a complex issue, as most programme evaluations will not have access to an adequate sample size or the time periods required to provide meaningful information about subsequent reconviction rates.

> *"Dogs getting rehomed, the lads going on to get jobs who've done this, those will be your main things just now. But obviously it affects people in different ways… It's not gonna turn everyone into a proper angel overnight… aye, that's the way some folk'll be, they'll be under that impression. But it is going to improve patience, socialising skills, might seem like small things but they make a difference. It's gonna be good, constructive stuff for folk, and that is important. Cos people are happy, they're happy to come to it, it's something they will really appreciate and it will be fulfilling for them, to do something positive." (P4:PMI).*

The multiple disadvantages previously experienced by young offenders were apparent in this study, with the majority having suffered adversity from a young age. Most reported having had negative and unfulfilling experiences of education, lacking engagement with training opportunities, very little experience of regular employment, having begun their offending behaviour in their teenage years and repeatedly offended since. In a study that tracked nearly 1 million Texas school children over six years, children and young people suspended or expelled for minor offenses were three times as likely as their peers to have contact with the criminal justice system within a year of the punishment. Children with diagnosed behaviour problems (such as attention-deficit/hyperactivity disorder), and reactive attachment disorder (often resulting from trauma, young children are unable to relate

appropriately to others) were most likely to be disciplined (Fabelo et al, 2011). This highlights the negative pattern that too frequently leads into the cycle of offending behaviour for young people, and provides a clear focus for attention on earlier prevention strategies for youth at risk. Identifying needs is vitally important, but interventions must also be realistic about what is achievable. Given the multiple disadvantages experienced and subsequent high level of support needed, it is important to recognise that no intervention can address all these needs and it is not constructive to suggest that any programme can be a panacea. Successful outcomes require a more holistic combination of support and this requires the programme to work effectively in partnership with other services and agencies.

The high percentages of participants engaged in productive activity in the long term suggests Paws does make an important contribution to successful outcomes but we need to be clear that this is not a miraculous transformation, and cannot remove all difficulties faced by young people after release. However, it is important to recognise that unlike many prison based dog training programmes evaluated previously (see Chapter 1; Table 1.1), Paws for Progress did not have strict selection procedures. Selection criteria such as clear evidence of existing engagement with training and support services and adherence to institutional standards of conduct creates selection bias; this may offer greatest likelihood of programme success (so this is understandable) but means that outcomes are perhaps less attributable to effects of intervention per se. Nonetheless, the Paws for Progress programme is aimed at a specific target group who are perceived to be the most likely to benefit; those who struggle most to engage with other services, have communication support needs, lack motivation and positive focus. Targeting those most likely to benefit could also be seen as a form of a selection bias, but given the voluntary nature of participation and the very limited number of selection criteria applied to applicants (access is primarily determined by interest and availability) this programme does not select participants based on the likelihood of successful outcomes.

Section 3: Consideration of programme features integral to success

Given the positive results of this evaluation, it is important to consider not only whether programmes are effective but why they may be so effective. Such

explanations offer greater opportunity to enhance the effectiveness of programmes more generally. What is it about the broader experience? It appears likely that, in addition to providing human animal interaction, there are other programme features that contribute to successful outcomes. Arluke (2010) suggests that participants in prison based dog training programmes are not simply learning about animal care; participants are discovering and practising new ways of thinking, feeling and behaving.   The valuable skills gained by participants are transferable and should generalise beyond the programme. It is important that programme features that contribute to these changes are documented to inform best practice for the development and delivery of these types of interventions, thereby maximising the benefit for their target populations. For example, Arluke (2010) highlights common features of Animal Assisted Activity (AAA) dog training programmes that relate to the shaping of participants' social experience. Arluke (2010) proposes that within this context, young people are exposed to close relationships with animals and humans, softened hierarchies, new perspectives, successes and manageable challenges. Programme features identified in this research are related to those identified by Arluke (2010) and will be considered further here in relation to Paws for Progress aims and outcomes, previous research on prison based dog training programmes and the evidence available on desistance.

Table 6.1: Relation of programme features integral to success to Paws for Progress programme aims.

	Programme features likely to be involved in change
Behaviour	HAI in specific form of dog training (emotional management and self-control), commitment and responsibility of rescue dog training model (changes in behaviour due to responsibility of helping dogs), pro-social behaviour and positive focus.
Education	HAI – initial appeal and facilitates positive learning environment. Generativity – opportunity to help others, critical to continued engagement (do for dogs more than selves initially). Student led, peer support and collaborative problem solving approach. Positive reinforcement (asset based approach).

Employability	HAI – brings out the best in people, social connection with peers and staff. Rescue dog training model – valuable transferable skills working together (first work experience for many). Generativity – contributes to high motivation and social (team work with shared purpose of helping dogs). Working towards targets and goals – autonomy, trusted with responsibility, and self-efficacy in achieving goals. Asset based approach and pro-social focus – improved confidence in abilities, aspirations for future.
Well-being	HAI – simultaneously relax, engage and motivate and creates positive environment, impacts on mood. Rescue dog model – develop relationships / bonds with dogs, enhance communication with others and develop supportive relationships with peers and staff. Generativity – helping others, sense of achievement gained. Being believed in – collaborative and asset based approach.

Human animal interaction

"A dog doesn't care if you're rich or poor, clever or dull, smart or dumb. Give him your heart and he'll give you his. How many people can you say that about? How many people can make you feel rare and pure and special? How many people can make you feel extraordinary?"   (p323, Grogan, 2008)

The opportunities for human animal interaction in prison based dog training programmes are clearly integral to the positive experiences of participants. Prison based dog training programmes tap into the unique ability of animals to appeal to troubled young people, to be highly responsive and engaging, and provide many opportunities for shared interaction (Arluke, 2010). It is worth reminding ourselves of the context; prisoners (who are often viewed as outcasts of society) who have been removed from regular social interaction and any loving relationships work with homeless dogs (who likewise suffer from social isolation and have multiple needs), thereby forming an opportunity for these two vulnerable populations to help each other in a mutual rehabilitation programme (Fine, 2010). Despite a variety of models and programme differences, in general prison based dog programmes encourage participants to interact positively with animals and people in a non-threatening and supportive environment. Therefore, rather than isolating human animal interaction

from other programme features, we consider how in prison based dog training programmes, interaction with dogs contributes towards and positively affects the social experience, the learning environment, the opportunities to help others and the skills gained by participants through training the dogs.

The benefits of human animal interaction were evident throughout the students' descriptions of their experiences at Paws for Progress. It is important to consider again the mechanisms that may influence experiences of human animal interactions. Dogs can be effective in reducing anxiety in stressful situations (Edney, 1995; Morgan, 2008), and emotionally positive interactions with a dog can decrease blood pressure (Friedman et al, 1983, 1993; Allen et al, 1991), raise levels of neurotransmitters associated with positive social emotions (Odendaal and Lehmann, 2000), and increase levels of oxytocin (Nagasawa et al, 2009). In this study, it was a key assumption that students would be enthusiastic and interested in opportunities to train dogs, and would be committed to helping the dogs in their care (see Chapter 2 Section 4 for assumptions of the Logic Model). However, the extent to which the participants care about the dogs was not fully anticipated. It is important that practitioners are ready to learn from experience, as original expectations may change. In Paws for Progress, it was common for students to care more about their dog's progress than their own:

> *"The bit I enjoy the most is like, <u>not just me but when the dog achieves</u>*
> *<u>something</u>. When the dog passes his APDT Good Companion Award. If he*
> *completes that I'll be happy. When the dog achieves something it's one step*
> *closer to getting a home."(P40:PI)*

It is therefore crucial the progress of the two participant groups – human and dog - are intertwined, to achieve the best outcomes for all. Furthermore, it is essential that the emotional attachments between handlers and dogs are understood by practitioners and prison staff. For example, the negative experiences of Paws for Progress participants in relation to dogs leaving the programme were minimal (see Chapter 5, Section 3c) and were typically mirrored by positive feelings about the dog's future and the handler's achievements in helping them. It is unlikely that this would have been the case without careful management; the students' work was consistently targeted toward helping the dogs be rehomed, students were involved

assisting in the rehoming process and the successful rehoming of a dog was a recognised and celebrated achievement for the handler, which signalled progression to work with more challenging cases.

Social experience: Developing relationships and working as a team

> "You're helping other people, doing the dog training, as well as helping the dogs. And it's not just about helping your dog. You notice changes in other people's dogs and you're involved in that, noticing what they like and don't like so everyone works together to make it easier for each other."(P6:PI)

Far too commonly, participants in custodial dog training programmes may have lacked nurturing, support, trust, care and good communication in their history of relationships (Arluke, 2010; see also Chapter 2, Section 2). The opportunities to develop positive peer and staff relations as well as affectionate relationships with animals make it possible for the emotional benefits of such connections to be experienced. The presence of animals also fosters more informal settings and serves to increases the rapport between people, who share humour in their mutual care for the animals. Dogs enhance social contact (McNicholas and Collis, 2000) and facilitate communication, effectively providing a 'communication bridge' for positive social connections (Levinson, 1969; Corson et al, 1977; Kruger and Serpell, 2006; Ormerod, 2008).

The promotion of pro-social effective teamwork is a central component of the Paws for Progress programme and this culture is evident in the interactions both with staff and between peers (as illustrated in the theme 'Working together', described by 80% of students). Practising communication skills and being polite and friendly within the programme is also seen to influence participants' interactions in other areas (Arluke, 2010). Relationships with supervisors can play a pivotal role in effective interventions (Scottish Justice Analytical Services, 2014). Encouraging and trusting relationships, in which participants feel that supervisors show genuine concern for their well-being and believe in their abilities, have been found to have the most positive impact (Rex, 1999). However, an important consideration is the young person's own resources and development of their social networks. The emphasis is on the recognition and development of the young person's competencies, resources, skills and assets.

Farrel's (2002) large scale study found that desistance was related most clearly to motivation and the social and personal contexts in which obstacles were encountered. Barry (2004) explored young people's experiences of desisting from offending as they grew older. The young people's decisions were related to a need to feel socially integrated, through their friendships, responsibilities and commitments; this could provide the resolve needed to desist despite a lack of access to opportunities. In Paws for Progress, students developed supportive relationships with their peers and staff, and frequently described the sense of social integration they felt as a result of participating in the programme (Social Impact, evidenced in 83% of interviews). This is likely to impact positively on future desistance from crime.

Rescue dog training model: Positive reinforcement training

Positive reinforcement training is simultaneously the most effective and enjoyable method of training dogs and resolving behavioural issues (e.g. see Serpell, 1996; Hiby et al, 2004). In prison based dog training programmes, training the dogs can be challenging but participants are able to see significant positive changes in the dogs' behaviour over time, and these successes are celebrated. Participants see clear positive benefits as a result of their work with the dogs, and are aware that their efforts have helped animals in need, providing a positive pro-social focus in what can otherwise be an isolating and stressful environment. Engaging in dog training is seen to contribute to improved emotional management, and the focus on reinforcing positive behaviours and building on the dogs' strengths is seen to impact on behaviour and social interactions.

> *"I noticed I gained a lot more patience and I wasn't as quick and easy to judge others, you try to see their best instead."(P5:PI)*

Empathic responses in terms of taking the perspectives of others (both animals and people) are encouraged, thereby facilitating such responses in other situations (Arluke, 2010).

> *"You learn not to solve things by shouting or threats or violence. It changes how you think about people, you think about why they're acting the way they are." (P10:PI)*

Arluke (2010) found that the improved emotional awareness and self-control that results from the experience of dog training is seen to transfer to other areas, including improved emotional management (increased patience and ability to manage frustration) in interactions with other people. This is frequently reported to impact on behaviour and relationships outside of the programme, such as relations with other staff members and peers, and families, and can enhance parenting skills (e.g. Furst, 2007; Turner, 2007). In Paws for Progress, it was notable that peers and particularly peer mentors encourage such consideration of other perspectives as much as staff, aiding other students in translating their learning (and understanding of learning theory) to different contexts (as illustrated in the quote above). The significant improvement to participants' institutional behaviour suggests that behaviour is indeed translated to other contexts.

Rescue dog training model: Trusted with responsibility; problem solving and gaining a sense of autonomy

The sense of responsibility from being in the programme can also deter interpersonal conflict, as participants describe avoiding getting into trouble due to the impact this could have on their dogs' progress. Students are faced with the responsibility of their dogs' progress, and work to develop individual training plans.

> "It's good that way. Thinking about what you're going to do and how you're going to do it - it gives you this sense of freedom, solving the problem yourself."(P11:PI)

Arluke (2010) highlights that opportunities to be trusted with responsibility and be a decision maker are another common feature of dog training programmes, which provides a sense of autonomy and competence, and fosters opportunities for increased sense of self-worth. Teachers who aim to control students' behaviour, rather than helping them control it themselves, undermine the very elements that are essential for motivation: autonomy, a sense of competence, and a capacity to relate to others (Jang et al, 2010). Focusing on developing problem solving skills may present a more effective approach for reducing challenging behaviour, improving communication, and repairing relationships (Greene et al, 2004; Greene, 2014). Challenging behaviour is best addressed by resolving the problems that are setting the stage for challenging behaviour in a collaborative manner. As shown in the review

of 'what works' in Chapter 2 (Section 3), in effective practice staff nurture strong relationships, especially with the most disruptive young people, and give the young people a central role in solving their own problems. This moves the focus from diagnosis and treatment, to one of collaborative problem solving. The next step is to identify each student's challenges and tackle them one at a time. In prison based dog training programmes this approach is used firstly to address the dogs' behaviour and training, and then applied similarly to developing plans for the students' progress.

Arluke (2010) found prison dog training programmes were set up to encourage participants to progress and assume new roles that signalled successful advancement. Examples of this in Paws for Progress and other programmes include progressing to roles with increased responsibilities such as assistant, advanced trainer or peer mentor, and reminding participants of the relevance and parallels between their work and the skills required for employment after release (such as engaging with visitors to the programme to practise communication / interview skills, creating profiles of the dogs being related to CV building / written communication skills). Participants also assume other roles that indicate competence; by becoming teachers themselves. Firstly, this is usually as trainer of the dog, but this frequently progresses to also teaching their peers and in some cases, educating visitors to the programme as well.

The asset based approach: Reinforcing pro-social behaviour

Arluke (2010) suggests that an asset based approach is common in dog training programmes. In an asset based approach, staff focus on building upon the strengths of participants, practising and developing new skills and setting participants up for success. This fosters a nurturing, positive environment rather than a critical, confrontational one. Staff never focus on the history or labelling of participants, both to minimise the risk of participants feeling judged on their former diagnosis or criminal history, or adversely biasing the staff member's interactions with participants. The asset based approach also provides a clear and transparent parallel within the programme; it is very similar to the approach taken by modern positive reinforcement trainers to train any species of animal and as explicitly implemented in Paws for Progress.

McNeill and Maruna (2007) describe the 'strengths-based' approach adapted for offender management practice in a move of focus from risk-based (control) and needs-based (treatment) approaches. A strengths-based approach has been included in progressive criminal justice reform (also termed as a desistance-focussed approach), to move away from the focus on the perceived deficits of offenders and a greater concern with the positive contribution the individual can make. This involves providing opportunities for the individual to demonstrate their value and potential, and experience success in support or leadership roles. At the heart of this approach is the 'helper principle', which suggests that it is better to give help than to receive it, and calls for more opportunities for ex-offenders to be helpers of others. Community service - which is more effective than probation or custody – is almost always rated as a positive experience, but particularly so when there is contact with the beneficiaries of the service (McIvor, 1992, cited in McNeill and Maruna, 2007). It seems that community service which is arduous and menial, and does not take a strengths-based approach with a focus on generativity may not be as effective. A strengths-based or desistance-focussed approach needs a more positive focus on what kinds of 'giving back' or 'making good' can and should be facilitated on the basis of an individual's potential to contribute positively. For this to work, it is a two way process; the offender must be willing and motivated to contribute positively, and society / the community must be ready to recognise and accept those contributions and the ex-offender themselves. In this approach, ex-offenders represent critical but neglected resources; this means re-engaging with local communities is necessary, developing partnerships to work together towards successful reintegration of ex-offenders who contribute positively and are an asset to society (McNeill and Maruna, 2007).

Positive collaborative learning opportunities

The collaborative efforts of programme participants and staff in dog training programmes foster a sense of belonging to a community (Arluke, 2010). By working together with a positive and pro-social focus, participants feel that their contributions are valued, and are encouraged to reflect on their development and the positive changes they have observed, gaining increased confidence as a result. Challenges that participants face within the programme are manageable, and participants are highly motivated to overcome these challenges to benefit the dogs in their care, by managing their emotions and frustrations and experiencing self-control, patience, calmness and

self-awareness. Drawing on the relationships that develop between them and their canine charges, participants articulate how the responsibility and love they feel for their dogs helps them rise to the challenges posed by animal training and care.

The human animal context is important in fostering a calming environment; responsibility, team work and self-control are hard to learn in a typical prison or classroom environment, when young people are hyper vigilant and tense. In contrast, the relaxing effect of human animal interaction is seen to provide a different context, providing a positive learning environment where participants are simultaneously relaxed, engaged and motivated to learn. Certain rituals, such as celebrating success of dogs and participants at graduation ceremonies, and commemorating the students' success and sacrifice when dogs leave the programme to go to new homes, acknowledge their altruism and the emotional costs that can result from relinquishing their attachment. Participants frequently articulate the challenges that these programmes pose, while simultaneously celebrating what they have achieved (e.g. 'Even though I was sad to see him go, it feels good to know I helped him'). This could also be influenced by the culture of programmes, to focus on the positives. It is also important to recognise the students' commitment and increase responsibilities, providing continued opportunities to progress.

> *"I'd be happy to do that, give a bit more of a hand to other people. I think if you have one session a week where you can just focus on your own dog, and then work as a peer mentor or assistant for the other sessions, it would be good."(P4:PMI)*

The assistants and mentors demonstrated creative approaches to helping others, and showed an awareness of how to apply the skills and teaching methods they had learnt. This compassion and empathy for others, first given an outlet in working together to meet the dogs' needs and then extended to other students, was a consistent feature of the group work on the course. The user led approach is critical to programme development; the young people's commitment and support is the biggest asset of such programmes, and this sense of ownership can be maximised by responsiveness to their feedback. Synergy with aims of partnering organisations also means partners work together to maximise benefits to young people; it is essential to

be flexible and responsive, and whilst maintaining the same ethos to the programme, adapt to suit participants' needs.

Developing a pro-social identity

Maruna et al (2004) identify two distinguishable stages in the process of desistance; primary desistance and secondary desistance. Primary desistance is used to describe any lull or crime free gap in the criminal behaviour and convictions of an offender. Secondary desistance, on the other hand, would be the movement from the behaviour of not offending to the assumption of the role or identity of a changed person. Evidence suggests that long term desistance does indeed involve identifiable and measurable changes at the level of the personal identity of the individual (Maruna, 2001; Farall, 2002; Burnett, 2004). Frequently, desistence requires a redefinition of a person's self-identity, as someone who is "making good" (Maruna, 2001). Furst (2007) explored the implications of the relationships that develop between prisoners and dogs in terms of developing a pro-social sense of self and desistance. Dog training programmes can influence the human participant's view of self and thereby play a valuable part in the process of desistance. When participants were asked what they learned about themselves as a result of their participation, the overwhelming response was feeling empowered by the programme, and that their participation enabled them to view themselves as pro-social. Participants, staff, and administrators alike noted the programmes' ability to instil a sense of responsibility in participants, and the demonstration of trust was also seen as a means of encouraging self-change. Participants commented on the program's ability to provide them with the opportunity to engage in worthwhile activity with benefits beyond those they personally receive. The respondents described positive effects as a result of their participation and recognised they were capable of, and enjoyed participating in, pro-social behaviours, indicating that participation may be able to provide a foundation for successful criminal desistance.

Unleashing potential: Opportunities to contribute positively

> *"It's the sense of accomplishment, when you've taught something, even just one thing. Whether you've taught your dog or you've helped another student, you feel like you achieved a real goal."(P40:PI)*

Research has demonstrated the positive effects of social interaction and taking part in voluntary work. In a study of charitable activity, Aknin et al (2013) found that while additional factors other than social connection likely influence the happiness gained from pro-social activities, their findings suggest that putting the social in pro-social is one way to transform good deeds into good feelings. Generativity, the desire to contribute positively and help others, typically emerges at the same development stage and at approximately the same time as delinquent / criminal behaviours typically dissipate; Maruna (2001) argues that this is not a coincidence. Pro-social activities and commitments are seen to provide a sense of purpose and meaning to former offenders, redeeming and legitimising the changes they have made toward a pro-social identity as social responsibilities are assumed.

In a similar way, voluntary work can induce a change in the likelihood of antisocial conduct. Uggen and Janikula (1999) examined the effects of voluntary activities on the future outcomes of young offenders and found a robust negative relationship with arrest (after controlling for potential confounds). This suggests a reduction in criminality can occur through gradual process of pro-social socialisation. Maruna (2001) expands this notion, describing desisters as care oriented and 'other' focussed, taking pleasure in creative and /or productive pursuits, and often feeling a sense of duty or attachment to a particular community, group or cause, through which they are redefined. Often, desisters assume the position of role model, or feel a strong sense of purpose to the work they do; and this, combined with the intrinsic rewards and social respectability of a generative role, may be necessary to sustain desistance (or the benefits of criminal behaviour would outweigh costs of desistance; McNeill and Maruna, 2007). By repositioning themselves in a role involving helping others, it is also more likely that community members will accept ex-offenders back into their communities.

McNeill and Maruna (2007) propose that the development, encouragement and facilitation of opportunities to help others should be at the heart of effective practice with offenders. Prisons are perceived as hindering generativity by separating prisoners from social and civic responsibilities; but should instead be an environment where helping others is modelled and nurtured, and where activities to help others are promoted and rewarded. The take home message is that if we want to encourage offenders to 'give up' crime, we must provide opportunities for them to 'give back'. It

is recognised that generativity is acquired through learning, by doing activities to benefit others in a setting in which such behaviour is defined as rewarding and good. This generative behaviour also needs to be recognised and appreciated, for the individual to then learn to intrinsically enjoy the pro-social identity and helpful behaviour, despite the challenges and adversity they may face.

Section 4: Practical Recommendations

1. Careful planning and development: The 5 Step approach

It should be clear from this evaluation how complex prison based dog training programmes are, and that these programmes are by no means a quick fix. It is essential that sufficient time is allowed for consultation and development processes, and practitioner training. It is also essential that the programme draws on the resources provided by a multidisciplinary team, involving members from partnering organisations with expertise in criminal justice, animal welfare, dog training, education and social care. By following the 5 Step approach to development and evaluation, the needs of the target population, programme aims and outcomes are clearly related and are based on a review of the available evidence. As shown in this evaluation, it is also critical to allow time for piloting and reviewing outcome measures, to ensure suitability for this applied context

2. Document programme and effects clearly

As highlighted in all previous reviews (e.g. Lai, 1998; Deaton, 2005; Furst, 2006; Mulcahy and McLaughlin, 2013), it is key that prison based dog training programmes are evaluated and that claims regarding their effectiveness are supported by research evidence. It is equally important that the programme features that contribute to success are documented clearly, so that best practice can be shared and inform future developments in this field.

3. Communicate effectively and share widely

> "Paws for Progress has been excellent for me as I have learned lots of new skills and have gained qualifications... It has been a life changing experience for me and I love working with the dogs."(P30:WS)

"I think that seeing how easy my dog changed his behaviour had a huge positive impact on helping me change mine."(P8:WS)

Being able to provide clear information about the programme is integral to gaining and maintaining support from partners, funders and supporters. Even if a full research evaluation is not possible, clear descriptions of what has been done, alongside simple but meaningful on-going monitoring tools, and clear descriptions of what has been achieved are important. As already highlighted, inflated claims not backed up by evidence are not helpful.

4. Recognising the value of support: effective partnership working

Support of the young people is essential to programme success; the user-led approach and positive experiences are essential to this. However, programme success also requires substantial external support and excellent partnership working. There are over twelve supporting organisations and numerous funders that have been integral to the programme development and to the sustainable delivery of the service. The partners in this programme have been critical to success, working closely to improve participant outcomes and enabling Paws for Progress to respond to feedback provided by those involved. The support from senior management teams and staff has been exceptional throughout the programme development, and has positively influenced the programme's efficacy. The Governor of HM YOI Polmont provides their perspective of the programme below:

> *"Many of the young men in our care have had negative and frustrating experiences of education prior to their time in custody, which has impacted on their behaviour and their opportunities. Paws for Progress delivers a resourceful and creative approach to education, allowing the students to experience the many benefits of learning, improve their mental well-being and increase their prospects of employment when they return to their communities. The development of mature and positive attitudes among the young men is clearly evident as they take part in the programme."*

> Sue Brookes, Governor of HM YOI Polmont, 2014.

5. *Contextualise learning*

> *"I think that making the material to help promote Harvey for rehoming changed*
> *how I felt about learning and writing. Although I'm in a different prison now and*
> *can no longer train dogs, I still write essays for Paws for Progress, and I have*
> *started education classes in creative writing, English and art, and I'm working*
> *towards my Higher English, too."(P8:WS)*

In 2007, HM YOI Polmont was encouraged to consider the potential for
contextualising core skills within vocational activities (HMIP, 2007). In the time since,
both HM YOI Polmont and the Scottish Prison Service have seen considerable
transformation of strategies and vision, with an emphasised focus on providing
positive learning experiences and creating a positive learning environment. The
Inspectorate Reports since Paws for Progress' implementation at HM YOI Polmont
reflect the contribution Paws for Progress makes to this positive learning
environment, as does the perspective provided by the learning providers, Fife
College:

> *"Work delivered through the Learning Centre, youth work and other types of*
> *activities such as "Paws for Progress" and the "Bike Shed" provide good*
> *opportunities for prisoners to develop wider skills and creativity."*
>
> HMIP (2013) Report on HM YOI Polmont, 2012.

> *"Some specific new and interesting work is going on (at HM YOI Polmont) and I*
> *particularly cite the 'Paws for Progress' initiative (where young offenders work*
> *with dogs from a dog charity) which is inspirational in its effect."*
>
> HMIP (2014) Report on HM YOI Polmont, 2013.

> *"Fife College are delighted to be working in partnership with Paws for Progress*
> *to support the learners to achieve a range of qualifications which can equip them*
> *with relevant skills for life, learning and work. This is done through an*
> *innovative activity based approach to learning suited to each individual, putting*
> *learners at the centre of the learning experience. This is a very worthwhile*
> *project and we will continue to work together to help improve the knowledge,*
> *skills and confidence of the learners involved."*

Audrey Mitchell, Fife College, 2014.

6. *Understand participants' commitment and need for continuity*

> *"Then week by week you want to improve on the dogs so you keep your attendance going. Keep your attitude towards the dogs. Speak clearly to the dogs. Giving it the right motivation. Then week by week that dog will just keep improving."(P57:PI)*

William Butler Yeats' quote; "Education is not the filling of a pail, but the lighting of a fire" has relevance here. There are ethical considerations to take into account; if students demonstrate such commitment and enthusiasm, it is essential that this is recognised, and students are provided with continuity and opportunities to progress further.

7. *Positive reinforcement training and an asset based approach*

Positive reinforcement training is essential to achieving improved behaviour and welfare for the dogs involved and is particularly pertinent to the ethos of prison based dog training programmes; in teaching kindness, compassion and empathy for others, it is critical that this approach is applied to avoid contradiction between the skills which the programme aims to change and the training methods employed. Participants in Paws for Progress demonstrated excellent understanding of why positive reinforcement was the most effective technique, the pitfalls of force and coercion and the negative impact of fear on the dogs' behaviour and welfare. Similarly, it is essential that an asset based approach is taken to student development and progress, building upon the young people's strengths and competencies and their belief in their own capabilities, to make positive changes for the future.

8. *On-going monitoring and evaluation: Responsive and meeting the individual's needs*

The monitoring and evaluation of Paws for Progress has influenced the programme development, and the feedback from participants and staff has simultaneously shaped the research process. It is critical that programmes are responsive to issues raised through feedback, monitoring and evaluation. Similarly, it is not advisable to take a one size fits all approach, given the multiple and differing needs of individual participants and dogs. This can make monitoring and evaluation more challenging, given the level of individual difference and variation in the data. Nonetheless, as

shown by this evaluation, there are clear areas of anticipated change, and by effectively monitoring and evaluating programmes, evidence can inform programme development, best practice and future research in this field.

9. *Ensure sustainability*

"See when the visitors come in, there's never been one thing that's gone wrong. The dogs are always alright and we're always alright. Show what we can do, what we can achieve."(P38:PMI)

As students felt it was important that Paws for Progress continued in the long term future, they were keen to demonstrate their commitment to others and to ensure others were aware of the positive effects. The sense of ownership and the responsibility to 'make it work' were described in relation to opportunities to demonstrate the capability of those involved and of ex-offenders generally, and particularly what could be achieved through Paws for Progress. It is critical that the sustainability of these programmes is considered and worked towards from early in development, and does not rely only on key individuals in the long term. Paws for Progress formed a steering group in 2013 to sustain the momentum gained from this successful programme and to work towards long term sustainability. Paws for Progress was incorporated as a Community Interest Company (CIC) limited by guarantee in February 2014; the purpose is "to enhance the well-being of people and animals by promoting and supporting, by whatever means, positive and effective interactions between them". The CIC's initial priorities are to continue to deliver and expand services in HM YOI Polmont, and to provide enhanced support on release so that these young men can put their skills and experience to good use (e.g. through volunteering and work placements, as a stepping stone towards employment or further education).

Paws for Progress plays a unique and independent role, working strategically and operationally to co-ordinate input across multiple disciplines and manage relationships with partners (SPS, University of Stirling and Fife College and multiple dog rescue organisations) and many more supporting organisations (currently 14). While Paws for Progress is indebted to all partners and supporting agencies who help to deliver positive change in the lives of both people and animals, Paws for Progress is

the only agency that focuses equally on all the aspects that make the dog training programme at HM YOI Polmont so successful.

10. Expand to meet need

"I think it would be a good idea for this programme to go to other jails and secure units, and maybe if I was given the chance to do a course like this I may have never ended up taking the path that I did and ended up in prison."(P38:WS)

"I think it would be a brilliant idea to target young people before they go to prison by setting up dog training programmes in schools or youth centres. Personally, I honestly believe that if I had known about Paws for Progress before I came to prison, I would not be here now."(P8:WS)

In criminal justice, it is important to consider a preventative approach, in addition to rehabilitation and reintegration. The aim of Paws for Progress is to enhance the well-being of people and animals by promoting and supporting positive and effective human animal interactions. Paws for Progress delivers Animal Assisted Education (AAE) and tailored Human Animal Interaction services to groups in society needing additional support. Following on from the prison-based project with young offenders at HM YOI Polmont, Paws for Progress now works with young people within the community, supporting children and young people with additional support needs who struggle to engage in education. Working in partnership with other organisations enhances service provision, and maximises the benefits for those involved; services are user led and tailored to each individual to ensure the intervention targets their unique needs.

Section 6: Conclusions

It is essential that Paws for Progress Polmont continues to be responsive to need and feedback, and draws from emerging evidence, influencing development as a service provider. Paws for Progress has pioneered the user led approach, contextualising learning within topics which are both relevant and enjoyable to students, and expanding the opportunities available. The logic model and service provision have continued to develop and expand over the last 3 years at HM YOI Polmont, and by continuing the excellent partnerships at HM YOI Polmont with this approach, it is reasonable to expect continued positive outcomes for the young people and dogs involved.

This research, the first comprehensive evaluation of a prison based dog training programme, has made a substantial contribution to our knowledge and understanding. By clearly communicating each step of the 5 Step approach, it has enhanced our understanding of the development processes required for effective prison based dog training programmes. The evaluation contributes to our understanding of effective methodologies in this applied context, which can be utilised to improve research practice in interventions in criminal justice. The programme aims have been directly related to the outcomes achieved, and the results have shown the extent of the contribution of Paws for Progress to the improved offender behaviour and likely future desistance from crime.

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Appendix 1: Revised version of BarOn EQ-i:S

BarOn EQi:S™

Name: _____ **Number:** _____ **Date:** _____

The BarOn EQi:S is made up of statements that give you an opportunity to describe yourself, by indicating how much each statement is true of the way you feel, think, or act most of the time and in most situations. There are five possible responses to each sentence.

1- Not true of me; 2- Not often true of me; 3- Sometimes true of me; 4- Often true of me; 5- True of me

Read each statement and decide which of the five possible responses best describes you. Mark your choices on the answer sheet by circling the number that corresponds to your answer. Although some of the statements may not give you all the information you would like, choose the response that seems the best for you at this time, even if you are not sure. However, if you don't know the meaning of a word, please ask and we'll help you.

There are no "right" or "wrong" answers and no "good" or "bad" choices. Answer openly and honestly by indicating *how you actually are* and *not* how you would like to be or would like to be seen. There is no time limit, but work quickly and make sure that you consider and respond to *every* statement.

	Not true of me	Not often true of me	Sometimes true of me	Often true of me	True of me
1. I'm a fairly cheerful person	1	2	3	4	5
2. I like helping people	1	2	3	4	5
3. I'm unable to express my ideas to others	1	2	3	4	5
4. It is a problem controlling my anger	1	2	3	4	5
5. My approach in solving difficulties is to move step by step	1	2	3	4	5
6. I don't do anything bad in my life	1	2	3	4	5
7. I feel sure of myself in most situations	1	2	3	4	5
8. I'm unable to understand the way other people feel	1	2	3	4	5
9. I prefer others to make my decisions for me	1	2	3	4	5
10. I act without thinking carefully first, which creates problems	1	2	3	4	5
11. I try to see things as they really are, without fantasising or daydreaming about them	1	2	3	4	5
12. Nothing bothers me	1	2	3	4	5
13. I believe I can stay on top of tough situations	1	2	3	4	5
14. I'm good at understanding the way other people feel	1	2	3	4	5
15. It's hard for me to understand the way I feel	1	2	3	4	5
16. I feel that it's hard for me to control my worries	1	2	3	4	5
17. When faced with a difficult situation, I like to collect all the information about it that I can	1	2	3	4	5
18. I have not told a lie in my life	1	2	3	4	5
19. I hope for the best about most things I do	1	2	3	4	5
20. My friends can tell me private things about themselves	1	2	3	4	5
21. In the past few years I've accomplished little	1	2	3	4	5
22. I tend to explode with anger easily	1	2	3	4	5
23. I like to get an overview of a problem before trying to solve it	1	2	3	4	5
24. I have not broken a law of any kind	1	2	3	4	5
25. I care what happens to other people	1	2	3	4	5
26. It's hard for me to enjoy life	1	2	3	4	5

BᴀʀOɴ EQ-i:S™

1- Not true of me;   2- Not often true of me;   3- Sometimes true of me;   4- Often true of me;   5- True of me

Read each statement and decide which of the five possible responses best describes you. Mark your choices on the answer sheet by circling the number that corresponds to your answer. Although some of the statements may not give you all the information you would like, choose the response that seems the best for you at this time, even if you are not sure. However, if you don't know the meaning of a word, please ask and we'll help you.

There are no "right" or "wrong" answers and no "good" or "bad" choices. Answer openly and honestly by indicating how you actually are and *not* how you would like to be or would like to be seen. There is no time limit, but work quickly and make sure that you consider and respond to *every* statement.

	Not true of me	Not often true of me	Sometimes true of me	Often true of me	True of me
27. It's hard for me to make decisions on my own	1	2	3	4	5
28. I have sudden strong urges that are hard to control	1	2	3	4	5
29. When facing a problem, the first thing I do is stop and think	1	2	3	4	5
30. I don't have bad days	1	2	3	4	5
31. I am satisfied with my life	1	2	3	4	5
32. My close relationships mean a lot to me and to my friends	1	2	3	4	5
33. It's hard for me to express my very personal feelings	1	2	3	4	5
34. I do things because of how I feel in the moment, without thinking carefully about the consequences	1	2	3	4	5
35. When trying to solve a problem, I look at each possibility and then decide on the best way	1	2	3	4	5
36. I've not been embarrassed for anything that I've done	1	2	3	4	5
37. I get depressed	1	2	3	4	5
38. I'm able to respect others	1	2	3	4	5
39. I'm more of a follower than a leader	1	2	3	4	5
40. I've got a bad temper	1	2	3	4	5
41. In handling situations that arise, I try to think of as many approaches as I can	1	2	3	4	5
42. I generally expect things will turn out alright, despite setbacks from time to time	1	2	3	4	5
43. I'm sensitive to the feelings of others	1	2	3	4	5
44. Others think I lack confidence in my actions	1	2	3	4	5
45. I'm impatient	1	2	3	4	5
46. I believe in my ability to handle most upsetting problems	1	2	3	4	5
47. I have good relations with others	1	2	3	4	5
48. It's hard for me to describe my feelings	1	2	3	4	5
49. Before beginning something new, I usually feel that I'll fail	1	2	3	4	5
50. It's difficult for me stand up for my rights	1	2	3	4	5
51. People think that I'm sociable	1	2	3	4	5
52. I responded openly and honestly to the above statements	1	2	3	4	5

Thank you for completing the questionnaire

Appendix 2: Assessment of Needs (AoN) Questionnaire (Revised Version)

Questionnaire

Name: Number: Date:

		I would rather not do this	I might find this difficult	I would manage this	I would find this easy	I would find this very easy
1.	Asking questions	0	1	2	3	4
2.	Going into a room full of people	0	1	2	3	4
3.	Making friends	0	1	2	3	4
4.	Talking to people	0	1	2	3	4
5.	Working alongside people your own age	0	1	2	3	4
6.	Following instructions	0	1	2	3	4
7.	Meeting strangers each day (e.g. customers)	0	1	2	3	4
8.	Mixing with different people	0	1	2	3	4
9.	Making decisions affecting others	0	1	2	3	4
10.	Giving instructions	0	1	2	3	4
11.	Getting to know people	0	1	2	3	4
12.	Keeping a conversation going	0	1	2	3	4
13.	Holding eye contact	0	1	2	3	4
14.	Disagreeing with others	0	1	2	3	4
15.	Expressing opinions	0	1	2	3	4
16.	People being too close	0	1	2	3	4
17.	Talking about yourself	0	1	2	3	4
18.	Talking in front of lots of people	0	1	2	3	4
19.	People looking at you	0	1	2	3	4
20.	Working in a team	0	1	2	3	4

Please imagine you have started a new job, and you don't know anyone who works there. Answer each question to describe how you think you would feel.

Appendix 3: Interview Schedules

Pre-test Interview questions

1. Could you tell me about any programmes, work parties or education you've been involved in since you have been at the prison?
    a. How useful did you find it / them?
    b. Did you notice any changes in yourself as a result of taking part?
    c. Have you done anything involving working in a group?

2. Can you tell me about your experiences of:
    a. School / learning
    b. Employment

3. Could you tell me about your history with dogs?
    a. Have you had your own dog or was it a family pet?
    b. Did you own a dog before you came to prison? If so, what happened to the dog when you came here?

4. Could you tell me about why you want to take part in the dog training course?

5. What do you expect to gain from being involved in the course?

Post-test Interview questions

1. Could you tell me about your experiences in the dog training course?
    a. Did you enjoy it?
    b. Did you find it useful?
    c. Did you notice any changes in yourself as a result of taking part?
    d. Did you like working in a group?
    e. How did it compare to other programmes or courses you have done at the prison?

2. Could you tell me about your experiences with the dogs?
    a. What part of working with the dogs did you enjoy most?
    b. What did you think of the dog you worked with most?
    c. Do you think it will affect how you are / what you will do with dogs in the future?

3. Was the course what you expected?

4. Do you have any suggestions of what I could do to improve the course?

Prompts to be used as needed: You said that …..Could you tell me more about that / what did you mean by that? What was it like? How did you find that?