



MONASH University

Prisons, Sustainability and Desistance: Exploring the benefits of therapeutic horticulture programs and animal programs in carceral settings

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Choi BSS (Hons) in

Criminology

A thesis submitted for the degree of *Doctor of*

Philosophy at Monash University in 2020

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Abstract

It is a considerable challenge to include practice that promotes desistance in most modern carceral settings. This thesis examines how sustainable programs, such as therapeutic horticulture (TH) programs and animal programs, have the potential to innovatively enhance offender transformation in prison by making good use of the natural environment in some carceral institutions. This research aims to gauge the impact of these two kinds of sustainable programs on facilitating desistance in prison. In this undertaking, this thesis demonstrates considerable originality by building a link between sustainability and desistance in carceral environments for the first time.

To investigate the relationship between the two concepts, this research conducts a desk review and thematic analysis to identify possible benefits of TH programs and animal programs on offender transformation. It further adopts a sustainability framework evolved from the business discipline to categorise the possible benefits on desistance into four themes: personal, social, environmental and economic. The analysis maps each themed benefit across the desistance literature and explains the corresponding relationships by cross-examining the data with interviewees' testimonies and experiences. The results indicate that the four aspects of sustainability are not of the same importance; the personal and social ones prevail over the other two aspects.

The findings can inform authorities about the merits and limits of sustainable prison programs and provide a guide to future development and implementation of sustainable programs, suggesting a ground-breaking and effective way to promote desistance during incarceration.

Declaration

This thesis is an original work of my research and contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.



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Acknowledgements

So many people have generously supported me during my PhD journey. Without your guidance, I would never be able to complete the PhD.

I am deeply appreciative to the interviewees for your time and for sharing your invaluable experiences. Your enthusiasm, expertise, and knowledge have contributed to the success of this research.

I would also like to thank the fantastic staff members of the Sustainability in Prisons Project (SPP), especially Ms Joslyn Trivett and Ms Kelli Bush, based in the US for offering your precious help in expanding my interviewee recruitment. This has truly enriched the data corpus and analysis.

My sincere appreciation is sent to my supervisors, Associate Professor Anna Eriksson and Dr Lennon Chang, who have given me valuable advice throughout these years of study. Many thanks to Anna, for your high efficiency in providing me feedback and sorting out my problems, and Lennon for bringing me to Monash and your attention to details. You have taught me to become a better researcher and made my PhD life easier.

My gratitude also goes to my dear friend, Dr Brian Steels, who was my mentor of the undergraduate internship and has been very supportive to me since then in both academic and non-academic aspects. Without you, I would never have started a PhD or tried to achieve the aims that were hidden in the deepest part of my heart: making changes for vulnerable groups through researching. Your continuous support and care have encouraged me to believe in my abilities to finish my research and widened my horizons by sharing important sources with me and connecting me with many great people in the field.

Thanks to my criminology cohort and officemates for your companionship and fun times. Special thanks to John, Maddy and Nicola for your time of sharing about milestones, challenges, life, plus coffees and cakes too. Your company has saved me from the influences of negative emotions and difficulties emerged in the research process and personal life.

I also wish to acknowledge the support and great love of my family and close friends vi who have endlessly backed me and always cared about me even we are not in the same place. I am extremely grateful to have an encouraging and understanding mother in my life and also a caring and considerate partner by my side. Your presence has substantially brought me to the completion of my study.

Last but not least, I must thank my beloved Siu Pak and Siu Hak, two adorable and crafty rabbits, for your 10 years of loyalty and friendship. May Siu Pak rest in peace and God bless Siu Hak until his last breath.

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Chapter 1. Introduction

This thesis examines the possibility of two increasingly popular kinds of sustainable prison programs, therapeutic horticulture programs and animal programs, on facilitating desistance in prison. The possible benefits of these programs are collected from existing literature and then categorised into four aspects of sustainability for analysis. These categorised benefits are then mapped against five key factors of desistance, which have been derived from diverse literature and research as a part of this research process. The validity of these categories has then been tested against interviews with previous program participants, ex-prison officers and other related experts who have worked, studied, organised or monitored the programs, and their testimonies and experiences of participating in sustainable programs in order to gauge the possibilities of such programs in promoting desistance.

1.1 Background of the Study

Rule 4 of the Nelson Mandela Rules (UNODC 2015, p. 3) highlights the importance of securing public safety and offender reintegration in the use of imprisonment:

[t]he purposes of a sentence of imprisonment or similar measures deprivative of a person's liberty are primarily to protect society against crime and to reduce recidivism. Those purposes can be achieved only if the period of imprisonment is used to ensure, so far as possible, the reintegration of such persons into society upon release so that they can lead a law-abiding and self-supporting life.

Rule 4 also asserts that authorities should ensure that offenders have access to appropriate education, vocational training and opportunities to work alongside other kinds of assistance in their essential needs, such as mental-, behavioural-, social-, and spiritual health. However, there is little evidence that agrees that current practices of imprisonment across the world are successful in achieving these aims, especially in addressing offenders' needs and reducing recidivism (Coyle et al. 2016). Instead, overuse of

imprisonment has resulted in sub-standard prison services, inhumane penal environments and ineffective rehabilitation programs (UNODC 2015).

Research has clearly demonstrated the adverse effects of incarceration on offenders and their communities, and found very few benefits. About half of incarcerated offenders have a history of mental health disorders, including drug and alcohol abuse (Australian Institute of Health and Welfare 2015), which are suggested to be strongly correlated to their offending behaviours (Fergusson, Boden & Horwood 2013). The harshness of prison conditions could increase negative psychological effects, exacerbate and mirror the trauma that offenders have experienced in their lives and expose them to increasingly deviant behaviours within prison (Goulding 2007; Haney 2002; Miller & Najavits 2012). Liebling (2004) also asserts that increasing use of prison is closely related to more social rejections of the offender after release. Moreover, as the current justice system falls short of looking after victims' needs, physically, symbolically and emotionally, such untreated concerns may give rise to secondary victimisation (King 2008). Many academics have been critical of current correctional techniques and incarceration, and have argued that prison itself leads to increased recidivism rather than a safer society (Goulding, Hall & Steels 2008).

According to recent reports, the costs (both pecuniary and wider social costs) associated with managing offenders in prison are significant. From a purely financial perspective, it is estimated that Australia spends approximately AUD110,000 per year per prisoner, which ranks among the top fifth of the 29 countries in the Organisation for Economic Cooperation and Development (OECD) in 2014 (Bushnell 2017). The report indicates that despite the significant expense, the Australian prison system continues to fail in its aim to rehabilitate offenders and reduce recidivism. Moreover, Australia's incarceration rates have been increasing for many years, along with the numbers of prisons, despite evidence that shows that incarceration, generally, does not increase public safety. In the past 10 years, the prison population has risen 51 per cent (Australian Bureau of Statistics 2017). Nonetheless, fear of crime, and public safety—particularly at night—remains a concern for approximately half of Australian citizens (Bushnell 2017). With the growth of prison populations, the potential for overcrowding, and the significant resources that are invested into corrections in Australia, the success of rehabilitative programs is an

urgent concern.

To maintain a healthy and functional prison, and to minimise the adverse effects of imprisonment on offenders, ‘the pursuit of values such as justice, tolerance, decency, humanity and civility’ (Garland 1990, p. 292) should be emphasised (see Section 7.4, P.138 for more about justice). Respect and humanity are found to be more important matters in prisons rather than harsh discipline (Liebling 2004). A more restorative and therapeutic approach is thus seen to be a better alternative to repairing harm and relationships (Newell 2001), and creating a safer society (Goulding, Hall & Steels 2008). The involvement of nature and animals in rehabilitation, which promotes sustainability, can be a potential solution to rehabilitate offenders without igniting adverse influences. Throughout the 1970s and 1980s, nature and plants gained credibility in improving human wellbeing and health. Clinical research has demonstrated its relaxing and restorative effects on humans, including improved mental health and a sense of serenity and calmness in hospitals, elderly centres and rehabilitation centres (Diehl & Brown 2016; Kaplan & Kaplan 1989; Ulrich 1984). For example, in a Taiwanese aged care centre, horticulture is used as a means to alleviate elders’ negative emotions and increase interpersonal intimacy (Yao & Chen 2017). During the same period, animals also began to gain recognition for engendering therapeutic outcomes (Lynn 1993). Contact with animals can possibly result in a series of emotional, physical and social benefits to human beings, especially to people with special needs, to recover or rehabilitate from mental and physical problems (Corson & Corson 1980; Furst 2007; Lynn 1993; Matuszek 2010; Sohn 2015; Veevers 1985). Beneficiaries include not only patients with mental and physical disabilities, but also veterans, elderly and homeless people who may have psychological or social difficulties instead of disabilities (Matuszek 2010). For example, in a study of veterans with post-traumatic stress disorder (PTSD), participants in animal therapy have expressed optimism towards life, reduced nightmares about previous traumas and decreased anxiety levels (MacKenzie 2015).

In more recent times, the involvement of nature and animals has been extended to be an essential part of many sustainable programs in prison and proven to be influential to rehabilitate incarcerated offenders (Cooke & Farrington 2016; Furst 2007; Moran & Jewkes 2014; Van der Linden 2015). The impact on offenders is found to be more

effective in reducing reoffending rates than the traditional punitive prison practices and harsh prison practices or environments (LeRoy et al. 2012; Rutt 2016; Wilson, Gallagher & MacKenzie 2000). Furthermore, involving nature and animals also lessens the psychological concerns of different stakeholders in the prison. For instance, in Rikers Island, the US, the GreenHouse/Green Team Programs has been proven to help reduce stress and mental fatigue for both offenders and staff members (Lindemuth 2007) while Furst (2006) also found improved mental health from incarcerated participants and prison staff after assessing 71 prison-based animal programs across the US.

In this current PhD study, the term ‘sustainable program’ refers to any nature-oriented or sustainability-related job in prisons related to planting such as gardening, horticulture and forestry, as well as other kinds of jobs that contribute to the environment or nature such as furniture refurbishment, endangered species rearing and animal training. While there is evidence of benefits, no in-depth examination as to why involving nature-related elements can result in a reduction in reoffending has been undertaken. Most research, which is Anglophone-based, has shown that programs involving nature-related components can change offenders in various aspects and reduce recidivism rates but the explanations of “why” and “how” are missing from the literature (see examples Holmes 2017; Kohl 2012; Sohn 2015; Strimple 2003; Turner 2007).

This thesis uses the Three-Legged Sustainability Stool developed in the discipline of business to present a unique picture of the importance of promoting sustainability in advancing prison rehabilitation services and fostering desistance (De Klein 2019). This model has allowed me to reconsider sustainability from a more diverse angle and to explain the connection between sustainability and desistance from a distinct perspective. From the idea of greening up prisons, economic and environmental benefits have been the dominating merits. However, by applying the thinking evident in the Three-Legged Sustainability Stool, it is shown that *social* benefits ought to be considered in order to develop a stable and safe society. Therefore, sustainability does not simply mean doing good to nature and the environment or making the prison look more natural. It also involves the growth of communities and their members. As a consequence, this study departs significantly from the more established notions of sustainability, which centres on how environmentally friendly a prison is, or how much a prison has saved from

greening up with the use of new technologies, to consider how sustainability can influence change in offenders. Most notably, from being self-interested to altruistic, by encouraging prisoners to take care of the environment, animals and other humans (Steels 2013). Hence, individuals' personal growth from sustainable programs, and the corresponding impact on environments, society and its economy, are linked with the key factors of desistance, which are identified and summarised among various related literature, to explore how prison programs can be progressed to greatly support desistance before and after offenders' release.

Two prominent areas of sustainable programs, therapeutic horticulture (TH) programs and animal programs, have been chosen as the focus of the analysis. TH programs adopt horticultural techniques and education to transform an individual while animal programs make use of animals to change a person (Lynn 1993). Since the 1990s, there has been research exploring the utilisation of these two programs on helping people with severe emotional disorders (Lynn 1993). Although they are being expanded to help transform offenders and are reported to be useful for fostering an understanding of harm, rehabilitation and desistance in many UK and US prisons, these programs still draw limited public appreciation and recognition, so they are not widely implemented in other parts of the world, including Australia (Steels 2013). Thus, examples and literature about TH programs and animal programs are largely drawn from the UK and US, considering the abundance of research as well as similarities in cultures and politics among these Anglophone countries (Pratt & Eriksson 2013). Through a desk review, thematic analysis and interpretations of interview data, the overarching aim of this thesis is to investigate the potential impact of TH programs and animal programs to support desistance according to the categorisation of four aspects of sustainability (i.e. personal, social, economic and environmental). This research aims to build a link between the outcomes brought by the two target programs and desistance theories, and to inform the public about the challenges and importance of implementing sustainable programs in Australia's prisons for promoting genuine public safety and social stability.

1.2 Research Questions

Based on the use of the natural environment in various institutions for healing and therapy, sustainable programs stimulating sustainability is suggested to transform

offenders in prison. Synthesising various ideas and definitions of greening and sustainability in prisons, this thesis will utilise the notion that a sustainable program is a means to achieve various kinds of sustainability in prison by corresponding identified sustainable benefits (i.e. personal, social, environmental and economic). While the discussion of sustainability extends beyond protecting nature or building a greener prison, the priority given to each aspect is uneven. Some aspects, such as economic sustainability, are traditionally prioritised over others (Littig & Griessler 2005). Moreover, the personal aspect has never been explored in the existing Three-Legged Sustainability Stool. These limitations restrict the overall utility of sustainability in understanding desistance. This research will thus present an integrative framework for examining the relationship between sustainability in a penal setting and desistance via establishing a link between the reported benefits of sustainable programs and desistance theories to investigate individual desisting journeys with the use of the four aspects of sustainability. It is believed that the inclusion of Australians' experiences in the analysis could create new dimensions of promoting sustainability in Australia's prisons and facilitating desistance. The three main research questions are as follows:

1. What are the key features of therapeutic horticultural programs and animal programs and how do these relate to desistance?
2. What are the penal stakeholders' (i.e. offenders, officer and experts) perceptions of the usefulness of therapeutic horticultural programs and animal programs, and their views on the potentials of these programs to enhance desistance?
3. What are the strengths and limitations of therapeutic horticultural programs and animal programs in relation to desistance?

Drawing upon existing international literature where sustainable programs have been more prominent in criminological research and consistently evaluated, offenders are able to benefit to different degrees from the programs. However, this realm of exploration is scarcely initiated in Australia. Furthermore, although positive evidence is given from program managers and participants worldwide, details of the whole process—like how those positive outcomes could be yielded and the keys of permanent desistance—remain vague. Most current literature lacks an explanation on 'why' and 'how' sustainable programs impact offenders in different ways, a more in-depth account is thus explored in

this research to understand the philosophies of these programs with desistance literature. Since desistance theories borrow notions from various psychological, criminological and sociological literature, such as cognitive psychology (Giordano, Cernkovich & Rudolph 2002) and informal social control theory (Sampson & Laub 1993), beside desistance literature, other relevant theories in related fields are also applied to explain the relationship between each benefit and desistance.

Meanwhile, a more Australia-dedicated perspective will be established in order to detail the potential benefits the programs can bring into the desistance journeys of Australian offenders. As this is an under-examined area of research, with much of the extant research and evaluations originating from the US, the UK or Europe, rather than co-opting the programs operating in other countries (that may not be comparable to the Australian experience), opinions and experiences of Australian stakeholders may provide more direct data on revealing the actual effect of the programs on desistance. In addition to scrutinising the literature of TH programs and animal programs, this research also conducts interviews with ex-prison officers, previous incarcerated participants, and other experts who have experience operating, taking part in or studying TH programs and animal programs in order to discover the impact, issues, possibilities and challenges of applying sustainable programs at large in Australia to facilitate desistance. Also, their opinions inspire the ameliorations of future implementation of the programs. Furthermore, the findings of this research may also benefit other countries with similar cultures and practices as Australia by contemplating the strengths and weaknesses of TH programs and animal programs in promoting desistance in prison. Since the key idea of these programs is to cultivate positive human growth and changes, as well as supporting offender reintegration and desistance via utilising sustainability concepts, regardless of nations, the findings of this thesis may provide a reference to all prisons with the same beliefs and philosophies by tackling the hurdles and considering the suggestions raised in the analysis.

Nonetheless, it is important to acknowledge that not all sustainability-related policies or programs in prison will be positively beneficial to the participating offenders as there are plenty of social, structural, political and penal issues that may impede one's transformation journey. Hence, there are concerns that the 'green' initiatives may

jeopardise offenders' rights or lead to exploitation and that the ultimate winners of sustainable programs will be more likely to be those in power, such as prison authorities, policymakers and governments, instead of the participants (White & Graham 2015). It is indisputable that prisons are being overused or misused by incarcerating people with mental and physical issues who need treatment and help more than imprisonment (Australian Institute of Health and Welfare 2015) and by offering sub-standard prison services, inhumane penal environments and ineffective rehabilitation programs (UNODC 2015). These problems are exacerbated by politicians and media who believe in and propagate 'tough on crime' policies as well as sensational news, crime and punishment matters. (Pratt & Eriksson 2013; Steels, Goulding & Abbott 2012). To this end, this thesis does not intend to hide the fact that prison is harmful and criminogenic in nature or to bluff the world into believing that prisons will become a nice and decent place that is free of unfairness or violence. Yet, relieving or examining negative influences caused by structural factors, like political, penal and cultural issues, on offending or offender rehabilitation will not be a main theme of this study. This research would rather focus on exploring the possibilities of enhancing the chances of offender desistance through implementing sustainable programs regardless of these ingrained problems among society. It is undeniable that this world cannot abolish the use of imprisonment in the foreseeable future and many prisons are so notorious in different senses that are not only impeding rehabilitation or desistance but also bolstering injustice and future offending. This thesis hence endeavours to seek a way out of such traditional and obsolete philosophy of running prisons and their programs and to explore strategies to facilitate desistance in prison.

1.3 Chapter Summaries

Chapter 2 introduces the theoretical frameworks of this research, desistance and sustainability. It reviews the desistance literature and forms the five key factors of desistance for examining the impact of sustainable programs on desistance. The four aspects of sustainability that evolved from the Three-Legged Sustainability Stool are portrayed to explain the notions of sustainability in details.

Chapter 3 first outlines the positive outcomes brought by sustainable programs in communities, then reviews the use of these programs in penal settings around the world.

It also defines and provides examples of the two studied programs, TH programs and animal programs.

Chapter 4 indicates the methodology adopted in this thesis. This includes the data collection process, details of the interviewees, analytical methods, ethical considerations and limitations of this research.

Chapter 5 identifies four lists of possible benefits from the two sustainable programs in prison. It embraces the results of the desk review of 65 reviewed reports and studies, and those of the thematic analysis that categorises the identified benefits into four themes according to the four aspects of sustainability.

Chapter 6 examines the influences of two types of personal benefits (i.e. physical and psychological) on flourishing offenders' personal sustainability and hence desistance during incarceration. The benefits are mapped against the five identified key factors of desistance in order to investigate their possible impact on promoting a desisting journey in prison.

Chapter 7, which conducts a similar analysis as Chapter 6, explores the connections between the potential social benefits yielded by the two sustainable programs and desistance facilitation in prison. This demonstrates how social benefits enhance one's social sustainability and then desistance.

Chapter 8 studies both environmental and economic sustainability. Environmental benefits and economic benefits found in literature are tested to determine whether they directly contribute to desistance.

Chapter 9 discusses the intertwining relationship between the four aspects of sustainability and provides four suggestions on improving the implementation of sustainable programs in the future, pertaining to voluntariness of program participation, community involvement, risks of offender overpromising/overconfidence and the unresolved issues left by sustainable programs.

Chapter 10 concludes the whole thesis by summarising the key points of each chapter. It raises the benefits and possibilities of advancing penal systems across the world with

broader use of sustainable programs like TH programs and animal programs to maximise desistance and public safety.

Chapter 2. Theoretical Frameworks: Desistance and Sustainability

Before developing a series of interventions to encourage desistance, understanding why people commit crimes and what makes them stop offending is fundamental. Research has shed light on the effects of social factors on desistance such as marriage, parenthood and job satisfaction (Laub & Sampson 2001). These external variables are undeniably influential, yet, personal factors that relate to an individual's views on morality, values and experiences can also contribute to their behaviour and transformation journey. Sustainable prison programs are argued to be holistically conducive to permanent desistance.

This chapter will outline the attributes of desistance that are drawn upon in this thesis for examining the impact of TH programs and animal programs, introducing the five key factors of desistance. It will also present the Three-Legged Sustainability Stool that contributes to formulating the four aspects of sustainability of this research (Purvis, Mao & Robinson 2019, p. 1). It is proposed that if prison services and programs can facilitate offenders' personal growth according to these four aspects, offenders are more likely to transform successfully and desist from crime in the long run.

2.1 Definition of Desistance

Desistance can occur naturally with or with interventions or therapies and the process varies by individuals which may happen under different ways and under different circumstances (Harris 2021). Through various life events, experiences and decisions, offenders may slowly grow towards permanent desistance in which relapses can be considered part of the transformation process (Maguire & Raynor 2006) as 'deescalation (a reduction in the seriousness of offences) or deceleration (a reduction in the frequency of offences) also features within a broader conceptualization of desistance' (Harris 2021, p. 1). Therefore, desistance is a dynamic process that reflects an individual's transformation journey from an offender to a law-abiding citizen through stopping and refraining from deviancy (Laws & Ward 2011). If only the end point of crime commission is emphasized, the process of reaching this point (i.e. the process of desistance) is neglected

(Bushway et al. 2001).

Researchers of desistance have identified and categorised a range of factors that are found to be conducive to moving towards cessation of crime. For instance, Farrall, Godfrey and Cox (2009, p. 86) summarise five main types of causes of desistance: ‘family-related (i.e. children grow up/marital reconciliation), employment related (i.e. retired/career advancement), sudden stop, increased decrepitude/extreme old age and unclassifiable’. They found that the majority of their respondents stopped offending suddenly without a specific reason. Family- and employment-related matters are also associated with desistance to certain extent. Others demonstrate that desistance may occur naturally due to aging and maturation in which loss of physical strength for deviant activities and improvement on rational decision can be seen (Gottfredson & Hirschi 1990; Maruna 2001), although Harris (2014) finds that only a small number of offenders desist naturally in her study. Desistance can also happen under the influence of external factors and important turning points of one’s life that provide positive social capital such as getting employed or married, having children, enrolling in military or engaging in education (Harris 2021; Sampson & Laub 1993; Sampson & Laub 2003). Additionally, internal factors of oneself like cognitive transformation ignited by psychological or behavioural intervention may result in desistance too (Giordano, Cernkovich & Rudolph 2002).

Integrating a wide of range of studies, two notable variables to desistance can be highlighted across literature: social attachments and cognitive reorientation (Bottoms et al. 2004). While Bottoms et al. (2004) adopted the terminologies of ‘social attachment’ and ‘cognitive orientation’, this thesis will apply the terms ‘social changes’ and ‘personal changes’ respectively for a clearer explanation of the sustainability framework (see Section 2.2). The desistance process is not merely a matter of offenders. It is suggested that rehabilitation or treatment plans should also attend to ‘the important roles that social relationships and the community have in the successful rehabilitation of offenders’ (Casey et al. 2011, p. 59). Both personal and social changes could occur at any stage of the desistance process, regardless of the sequence. There is no fixed routine for transformation to occur, and it is important to recognise that desistance is a process, not an event.

2.1.1 Social Changes (Social Attachment)

Social bonds are deemed to have a significant association with desistance in which attachments to employment and marriage in particular are influential in developing a healthy lifestyle (Hirschi 1969; Laub & Sampson 2003; Savolainen 2009), particularly for men. Positive social relationships could create sets of social capital that inhibit crime and enhance social bonds between offenders and their significant, non-criminal networks. In this research, social capital is seen as a significant tool to achieve social sustainability. It acts as bridges between people in the same community with ‘shared norms, values and understandings that facilitate co-operation within or among groups’ (OECD 2001, p. 41; Scrivens & Smith 2013). Investments in these positive social relationships, like marriage and employment could all engender social capital. When ‘the value of these investments exceeds the value of continued involvement in crime, they contribute to the process of desistance’ (Savolainen 2009, p. 286). Although the development of social capital could be a prolonged process, desistance would occur moderately and cumulatively (Laub et al. 1998). This thesis, however, does not intend to frame relationships such as marriage as protective factors as research has shown that these relationships are not always pro-social and may lead to more offending affiliations or tendencies (Van Schellen, Poortman & Nieuwebeerta 2012) and that marriage is less likely to have protective effect on women offenders compared to male, or even results in negative influence if they have a criminal partner (see examples Bersani, Laub & Nieuwebeerta 2009; Craig, Diamond & Piquero 2014; Zoutewelle-Terovann et al. 2014). Despite this, marriage is still a desisting factor for some offenders, especially among males who had more extensive criminal records, had more stable marriages, and married to a non-convicted spouse (Van Schellen, Apel & Nieuwebeerta 2012), or among women who were from disadvantaged marginalized groups (DiPietro, Doherty & Bersani 2018). Since the released offenders interviewed in this research are all male and the expert interviewees and ex-prison staff were all worked in male prisons, the impact of marriage still potentially has a role in facilitating desistance across this study.

While social support and more pro-social routines are present, many released offenders have credited these positive social impacts as catalysts for developing permanent positive behavioural changes and breaking their criminal cycles (Gadd & Farrall 2004). Nonetheless, it is not a must that these turning points of life can lead to law-abiding

citizenship. A poor relationship with a spouse and unsatisfactory employment can adversely contribute to involvement in criminal activities (Crutchfield 1995; Savolainen 2009). Similarly, employment with unfavourable conditions such as unfair treatment, fluctuation and a poor employer-staff relationship hinder the probabilities of successful transformation. Quality and stability are thus the key determinants. Desistance is unlikely to be cultivated if the released offenders do not possess affirmative and constructive social ties with their significant others or the community. Importantly, these significant relationships have to be pro-social. If the attachments to significant others are anti-social or unhealthy, it will not support desistance and might instead make deviant or illegal activities tempting and rewarding.

2.1.2 Personal Changes (Personal Agency)

Pro-social *personal* changes, also known as personal agency, when combined with positive *social* changes, could augment the possibility of fostering a law-abiding lifestyle. Post-release life experiences, friendship, cultural values, self-evaluation and beliefs can play a significant part in both desisting from and encouraging participation in crime. Research has demonstrated that most desisters do not blame themselves for their previous wrongdoing. They are inclined to draw a clear boundary between the already transformed selves and the past wrongdoers (Gadd & Farrall 2004). This finding coincides with Braithwaite's (1989) theory of reintegrative shaming in which stigmatisation is detrimental to transforming an offender but shaming the illegal act instead of the person *per se* is effective with reintegrating the wrongdoer back into society, as well as preventing reoffending.

The shaming process includes the change of self-identity and social identity. Maruna (2001, p. 7) recognised that 'to desist from crime, ex-offenders need to develop a coherent, pro-social identity for themselves'. During the development of a brand new pro-social identity that is deviance adverse, stigma attached will spontaneously be steered away (Giordano, Cernkovich & Rudolph 2002). For example, becoming a good father not just reforms a person's image, it also creates 'a sense of maturity and responsibility' (Laub & Sampson 2001, p. 51). People who have stepped out of the criminal cycle usually possess a better level of self-efficacy, clearly recognising the meanings of lives and perceiving lives as controllable (Maruna 2001). They have ameliorated the view of

themselves and their future, as well as transforming their points of view towards deviance and cultivating altruism. Some of them would like to redeem what they have done wrong in various ways to avoid others from entering the same situation as they did (LeBel et al. 2008).

An individual's decision is believed to be an important contributor to stepping away from crime (Farrall & Bowling 1999). It is believed that the decision to desist stems from a rational choice of an individual. There are many factors that can affect a person's decision to desist from further crime commission. Their decisions can be susceptible to their perceptions of self and that of the outside world. It is asserted that 'the probability of desistance from criminal participation increases as expectations for achieving friends, money, autonomy and happiness via crime decrease' (Gadd & Farrall 2004; Shover & Thompson 1992, p. 97). Some scholars trust that offenders would re-assess their life prior to the onset of desistance and such re-assessment is directly related to the burnout of offending (Burnett 1992; Gadd & Farrall 2004). Different emotional states have a role in this sense as well. Either positive or negative emotions or perceptions of self could result in desistance or reoffending (LeBel et al. 2008; Maruna & Copes 2005). This demonstrates that personal and social affiliations are of equal importance in entirely transforming an offender.

From the abovementioned literature, it is widely acknowledged that marrying or having a wish to transform is a common desisting motivation among offenders but the correlations of these turning points and the psychosocial explanations of conflicts in the offenders' minds are left unclear. In-depth research pertaining to the decision-making process and the emergence of views, skills and abilities to support desistance is lacking. This thesis thus aims to examine the benefits that are conducive to desistance in order to explore the elements needed to enhance desistance in prison and the comprehensive needs of offenders to desist, as well as the changes that could be made by communities to assist their transformation.

2.1.3 The Five Key Factors influencing Desistance

Referencing to relevant theories of desistance, it is understood that societal reactions and (personal) agentic experiences are both influential to the desisting path of an offender.

After reviewing various desistance literature, I extracted and developed five main categories that contribute to permanent desistance, which will be discussed below in turn. They all involve a transformation or development in cognitive thinking and social attachment and will act as a basis for evaluation and theoretical testing of the potential effectiveness of TH and animal programs in prison, and their possibilities in supporting desistance. These attributes inform us of the significant factors supporting desistance both before, during and after release and highlight the aspects that prison programs and services need to reinforce in order to help offenders develop a desisting lifestyle.

i. Strong Pro-Social Relationships with Society

All main life-changing events, such as employment, marriage and parenthood, involve a change of identity. A healthy and stable partnership or marriage tends to keep the released away from reoffending (Farrall & Bowling 1999; Gadd & Farrall 2004) since a series of new obligations and expectations have been engendered. Additionally, the significant shift of peer affiliation, from peer to partner or spouse, could increase the spouse's awareness of any participation or occurrence of illegal and deviant behaviour (Warr 1998). Yet, many offenders' pre-incarceration lives were filled with conflicts with their partners (Giordano, Schroeder & Cernkovich 2007). If these disputes are not properly addressed after release, negative emotions may accumulate and contribute to offending again. In order to achieve pro-social outcomes, the spouse of the offender has to be conforming and disapproving of illegal behaviour, as well as having high respectability in the offender's eyes (Giordano, Cernkovich & Holland 2003). As an intimate relationship develops, each party understands each other's attitude toward offending. If the offender's spouse is law-abiding and respected by the offender, this will lead to an affirmative and agentic turn away from a deviant lifestyle. Likewise, a deviant spouse will impose the same impact on the released who may easily return to crime due to their partner's antisocial influence (Giordano, Cernkovich & Holland 2003).

A stable job also allows individuals to invest more time in work tasks and responsibility-taking activities. Hectic and regular duties keep individuals in routine activities and organised lifestyle (Farrall 2002). Another chief turning point, parenthood, has the same effect in cultivating responsibilities of the individual who has become a parent or begins to take the parent role seriously. The priority given to child caring minimises the

opportunity of engaging in illegal activities (Savolainen 2009). Offending will then be less favourable if they dedicate their attention and time to their kids. Although some research found a positive result on this (Giordano et al. 2011; Uggen & Kruttschnitt 1998), there are also studies showing that motherhood may not lead to a higher likelihood of desistance (Bachman et al. 2016) due to complex issues. Additionally, there are other pro-social relationships that can positively help the released to maintain desistance. For instance, neighbours, workmates, conforming spouses' friends and religious groups that promote pro-social values can increase offenders' contact with pro-social community members. Pro-social friendship is also a booster of desistance, especially for the released with ongoing life difficulties and deviancy such as housing and drug use (Giordano, Cernkovich & Holland 2003).

It is important to note that there is no absolute pathway for offenders to maintain a desistance lifestyle. Different people require different supportive networks to aid desistance. Marriage and parenthood are not the only choices that can facilitate desistance as these relationships may not always be healthy, supportive or pro-social for offenders to desist. The transformations of identity and adoption of new roles occurred in the process of pro-social relationship building are the keys to desist individuals from crime and these can happen among relationships outside families. Nonetheless, such changes do not occur instantly. Similar to developing pro-social relationships, it takes time for offenders to progressively commit to desisting lifestyles (Serin & Lloyd 2009). Simply eliminating risk factors of offending is not enough to desist unless offenders possess positive and pro-social relationships and experiences (Serin & Lloyd 2009).

ii. De-labelling and Recognition by Significant or Respected Others

It is found that recognising an individual's amelioration of behaviour and de-labelling them from the role of 'criminal' are influential to offenders' desistance journeys, especially when it involves their significant or socially respected others (Maruna et al. 2004; Trice & Roman 1970). According to the labelling theory, an individual will act according to the stigma that is given by people around them (Lemert 1951). They tend to envisage themselves as an individual that is attached to the negative label, encouraging criminality and hampering desistance from emerging. LeBel et al. (2008) found that research participants who had perceived stigmatisation and social exclusion were more

likely to be reincarcerated despite that a number of their social difficulties had been addressed post release. It is argued that individuals of such experience possess limited if not no opportunity to develop self-respect or be reintegrated into the pro-social circles but are affiliated by the subcultural groups, hence causing persistence instead of desistance (Braithwaite 1989). De- labelling is like labelling in which people are likely to act according to the label put on them. The notion of 'looking-glass self-concept' supports that if a person receives high expectations from others, especially their significant or respected others, they are more likely to cultivate self-belief and better performance (Maruna 2001; Rosenthal & Jacobson 1992), akin to the self-fulfilling prophecy.

Wexler (2001) asserts that de-labelling is the most influential if it is granted by people with higher social status, such as governmental authorities and professionals, because de-labelling from families and friends may be gained with ease. Meanwhile, Maruna (2001) believes that de- labelling can simply come from a person with good moral standing who has witnessed the offender's change of identity. Thus, these important people differ among individuals: they could be those who are well respected in the community or those who are considered by the offenders as significant people. As desistance is best facilitated when an offender's transformation of behaviour and identity are recognised by others and that recognition is expressed clearly to the offender (Maruna et al. 2004), these significant or respected figures need to be engaged in the de-labelling process to yield the best result. They have to explicitly support and acknowledge the change or contribution made by the (released) offender (Maruna et al. 2004; Meisenhelder 1977) so that the general public could realise and comprehend the differences.

The de-labelling process will also be the more effective if it is targeted at an individual's whole being rather than their behaviour (Ahmed et al. 2001). Emphasising one's virtues instead of acts can nurture a pro-social identity (Ahmed et al. 2001). De-labelling thus helps to certify the effort put by offenders on transformation (Maruna et al. 2004; Meisenhelder 1977), hence allowing them to build more confidence and a positive identity. Such certification of effort assures the release offender that they could be recognised as a law-abiding citizen. (De)Labelling effect and cognitive changes might then occur and foster self-worthiness and a sense of commitment to act pro-socially

(Ahmed et al. 2001). This reflects that not just the offenders have to transform, other community members and authorities also need to change their attitudes and beliefs towards offending and the released, from exclusion to inclusion, from stigmatisation to recognition, offering opportunities for offenders to indicate their transformation and growth as well as sustaining their desisting journeys.

iii. Negative Feelings about the Past

There are different triggers motivating the cognitive transformation when an individual looks back on their past. Emotions certainly have a role to play here. Positive feelings are undoubtedly beneficial to encourage forward-looking belief. Negative emotions, such as feelings of guilt, shame and remorse may also be conducive to cognitive and identity transformation. Maruna (2001) argues that realising the undesirable consequences of crime and possessing a wish to stop offending are often the important triggers of the transformation. For instance, feeling shame can be a motivation for desistance (LeBel et al. 2008; Leibrich 1996) as it questions one's behaviour but at the same time retains one's self-worthiness, thus reducing the rationales of reoffending. Nonetheless, desistance is not an automatic response to shame. Indeed, stigmatised shaming may arouse powerlessness and depression, which makes reoffending attractive (Maruna & Copes 2005).

Shame and stigma are subjective variables that are interpreted by individuals, but also based on the social perceptions of one's behaviour. The transformation process embraces reconstructing offenders' past into a redemption narrative that portrays the journey of desisting from crime and encountering difficulties when they endeavour to reintegrate back into society (Harris 2014). Released offenders could find their way to constructive life and permanent desistance through a 'logical self-story' to address their problematic past and to justify their ability to transform (Maruna 2001, p. 55).

iv. Positive Feelings about Self and Future

Positive feelings towards self or future can lead to a desisting lifestyle, including but not limited to hope, motivation and confidence. For instance, LeBel et al. (2008) pointed to the potential impacts of hope on offenders, that believing in oneself is the key to transform if not to completely desist themselves from crime. Hope has been defined by

Snyder et al. (1991, p. 570) as ‘the perception of successful agency related to goals’, meanwhile ‘the perceived availability of successful pathways related to goals’. It is a realistic desire to reach the set outcome with an awareness of one’s own competence and available means. If the challenges faced by released offenders are not too excessive, a feasible hope, alongside positive social relationships like marriage and employment, allows them to take charge of difficulties and distress as well as staying on their desistance path (LeBel et al. 2008).

Desisters are generally optimistic towards their future and have strong faith in their ability to cope with life (Maruna 2001). To an offender, feeling in control of their future and maintaining motivations are as crucial as hope. Desistance narratives explore that desisters tend to possess a series of plans for their future and the confidence to achieve their goals (Farrall & Calverley 2005; Giordano, Cernkovich & Rudolph 2002; Maruna & Immarigeon 2004). Persistent offenders on the other side are discovered to be more favourable to belief in fate, less likely to keep forging ahead over challenges and confused about their future (LeBel et al. 2008). Assisting (released) offenders to manage social problems is essential but may not necessarily lead to desistance because other socio-economic problems such as housing and financial difficulties could also be obstacles to sustain offenders’ motivation to change. Even if they have begun with a strong and realistic desire to transform, these excessive issues may overwhelm their motivation and hope (Burnett & Maruna 2004). Hence, social and personal perspectives are inevitably interconnected in the desistance discussion. It is undeniable that having a clear purpose and meaning of life could be an influential factor to desistance.

v. *Maturation*

Quite often, offenders stop the criminal cycle naturally or suddenly without any interventions or significant turning points in their life. This kind of natural desistance, which is particularly common among young adults, indicates the phenomenon that crimes and deviance can be an expression of immature behaviour, and juvenile offenders cease offending naturally because of maturation and aging (Harris 2014). Maturation is found to have a very strong correlation with desistance (Laws & Ward 2011) and influences a wide range of offenders whose wishes to stay away from crime gradually develop as aging. The intention to commit crime may be abandoned due to reducing energy level or

unwillingness to be involved (Brown & Miller 1988; Quetelet 1833; Youssef, Casey & Day 2011). Some contributors, identified by Farrall and Bowling (1999), have illustrated the emergence of such immediate cessation of criminal activities. For example, tiredness of being caught and serving sentences, shock such as being injured in a crime, understanding of the seriousness of crimes such as longer imprisonment, and realisation of important life events or people in their life. These factors are found to be the potential contributors to changing the decision-making process of an individual and hence motivating them to desist but they are considered as ‘other unexpected events’ that fall outside the scope of this thesis. Instead, the focus will be on maturation that involves cognitive development as the unexpected events or aging do not imply maturation unconditionally. Maturity needs to be seen in both mindsets and behaviour; it is not just reflected on one’s bodily growth. People who only turn mature in age but not in ways of thinking or behaving may become life-course persisters, differing from the desisters who start and end their deviance or offending cycles during adolescence due to social controls (Sampson & Laub 1993).

In this thesis, I will apply the five key factors of desistance with the aim of scrutinising the impact of TH programs and animal programs on offenders’ desistance journeys. While desistance is normally a post-release concern, this thesis argues that desistance can begin during incarceration and hence, it is important to explore what can be done to facilitate and consolidate this before release. Aligning with the Nelson Mandela Rules, this thesis argues that reducing harm and recidivism or managing the so-called criminogenic characteristics should not be the sole purpose of imprisonment; instead, addressing offenders’ fundamental human and social needs through novel programs may result in better chances of supporting and sustaining desistance. To better illustrate and analyse the connection between desistance and the benefits from TH programs and animal programs (which will be outlined in detail in Chapter 5), the next section will introduce the four main aspects of sustainability that I will categorise each of the benefits into.

The four aspects of sustainability will demonstrate the nuanced needs of supporting desistance through these four kinds of developments. As there are miscellaneous types of potential benefits resulting from sustainable programs and a lack of consistent

framework for analysis or evaluation, this study will evolve an existing Three-Legged Sustainability Stool famed in the business discipline based on desistance literature and then categorise the benefits accordingly for examining their impact on facilitating desistance. The four aspects of sustainability will provide a more systematic framework for investigating TH programs and animal programs.

2.2 The Four Aspects of Sustainability

Littig and Griessler (2005, p. 77) say that:

Sustainable development should allow [for] the satisfaction of existing needs in the long term, which means that sustainability ought to be directed towards the relationships between nature and society. These relationships should not just be functional for a short period of time but also make it possible for future generations to meet their needs.

This definition of sustainability is what most people would think about when they hear the term, where protecting the environment and saving resources for the next generations is the key focus. However, there are scholars offering more nuanced definitions and meanings of the idea of sustainability. For instance, Jahn and Wehling (1998) state that interactions with nature include different social, political and cultural aspects, and Drexhage and Murphy (2010, p. 6) argue that sustainability ‘embodies integration, and understanding and acting on the complex interconnections that exist between the environment, economy, and society’. These definitions indicate an integrated approach in understanding sustainability that is comprised of diverse perspectives, in particular to environmental, social and economic. When adopting such integrated meaning of sustainability into the criminological context, White and Graham (2015, p. 847) denotes sustainability as an ethos and actions that ‘minimise the social, economic and environmental impact of criminal justice practices and institutions’. Having taken these notions into consideration, in this thesis, the meaning of sustainability is moved beyond a narrow focus on environmental and fiscal benefits of particular programs areas which are traditionally prioritised over others (Littig & Griessler 2005), to include a discussion of the social and individual needs that are necessary to comprehensively develop sustainability in different dimensions in penal settings. For the purpose of this research, the concept of sustainability is then further divided into four areas for nuanced analysis:

social, environmental, economic and personal sustainability. Although there can be conflicts around the priorities of these four aspects of benefits among groups and people with various perspectives or beliefs (Giovannoni & Fabietti), this research attempts to promote offender desistance with the integrated approach of sustainability in which not only the benefits of helping offenders to transform and reintegrate are considered but benefits of communities are also taken into account so as to explore measures that can best serve the needs of both general public and offenders in accordance with the four aspects of sustainability.

Due to the absence of a systematic model or framework to explore sustainability in criminology, this thesis borrows the Three-Legged Sustainability Stool that originated from the business discipline and is one of the most commonly used models to study sustainability (De Klein 2019). It indicates that economic, environmental and social aspects are central to a comprehensive development of sustainability (see Figure 2.1). Researchers who study the origin of the three aspects of sustainability argue that ‘there is no single point of origin of this three-pillar conception, but rather a gradual emergence from various critiques in the early academic literature of the economic status quo from both social and ecological perspectives’ (Purvis, Mao & Robinson 2019, p. 1). Although the origin of this model remains somewhat unclear, its inclusion of the three notions, or ‘legs’, has contributed to many of the contemporary discourses on sustainability (Purvis, Mao & Robinson 2019). Importantly, it allows this thesis to reconsider sustainability from a more diverse angle beyond ‘green programs’ and helps explain the connection between sustainability and desistance in prisons. A brief summary of the three aspects of environmental, economic and social sustainability is outlined below in Figure 2.1.



Figure 2.1. The Three-legged Sustainability Stool Model (Willard 2010)

i. Environmental Sustainability

Environmental sustainability, a traditional facet in the sustainability context, aims to improve human welfare by securing natural capital that embraces water, land, air, minerals and ecosystem services (Goodland 2000). The public thus put emphasis on saving resource and lessening pollution through diverse means, like saving water, using renewable energy, recycling waste, conservation and restoration (Schenkel 2010; Willard 2010).

Environmental sustainability is probably the most well-known aspect in discussions of sustainability. The general public can usually immediately affiliate ‘saving the environment’ to sustainability. With different sustainable programs in prisons, the environment can benefit alongside individuals and communities. However, even if environmental sustainability emphasises financial saving only, participants could still gain employment skills, but the psychological development, which is an important factor of personal transformation, may be undermined.

ii. Economic Sustainability

Economic sustainability generally refers to ‘maintenance of capital’ (Goodland 2000, p. 22). At an individual level, it tries to maintain ‘the amount one can consume during a period and still be as well off at the end of the period’. It involves ‘securing good jobs, fair wages, security, infrastructure and fair trade’ (Willard 2010). At a macro level, it

takes maintaining capital of the community and the country into account. Nevertheless, similar to the drawback of a single focus on environmental sustainability, the underlying purposes of sustaining economic sustainability may be reduced by monetary benefits. Hence, this perspective will not play a significant part in this research but will still be explored.

iii. Social Sustainability

Social sustainability is defined by the Western Australian Council of Social Services (quoted in McKenzie 2004, p. 18) as a phenomenon that:

...occurs when the formal and informal processes, systems, structures and relationships actively support the capacity of current and future generations to create healthy and liveable communities. Socially sustainable communities are equitable, diverse, connected and democratic and provide a good quality of life.

Considering such significance of the social development, various kinds of social capital are needed to be strengthened in offenders' transformation process. Social capital, which is referred to 'social interactions between individuals and other groups and individuals' (Farrall 2004, p. 61) in which 'shared norms, values and understandings that facilitate co-operation within or among groups' (OECD 2001, p. 103) can be found, is considered essential in aiding an individual in increasing their own productivity (OECD 2001) and maintaining social sustainability. According to Coleman (1988, p. 98), social capital:

'...is defined by its function. It is not a single entity but a variety of entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors – whether persons or corporate actors – within the structure. Like other forms of capital, social capital is productive, making possible the achievement of certain ends that in its absence would not be possible.'

Social capital is thus seen as 'socially structured relations between individuals, in families and in aggregations of individuals in neighbourhoods, churches, schools and so on' (Hagan & McCarthy 1997, p. 229) in which the bond with families and work are

particularly important for offenders who aim to desist (Farrall 2004). To maintain the good social lives of citizens, essential elements like ‘working conditions, health services, education services, community and culture, and social justice’ (Willard 2010) have to be promoted alongside embedded trust, social connectedness and social ties (Brown & Ross 2010). Social justice, which is an important element contributing to social sustainability (see Figure 2.1) and also one of the main concepts utilized in this research, embraces different definitions and notions. Equality and needs among all community members are two of the key conceptions that social justice reflects (Sachweh 2016). This thesis adopts O’Mahony’s idea of ‘providing fair and decent treatment for all citizens across every domain including housing, health, education and employment’ and allowing ‘personal advancement to all citizens’ (quoted in Corr 2014, p. 265), indicating that social justice should be entitled to all people including offenders.

Figure 2.1 illustrates that a society with a high quality of life requires these three dimensions to balance and support each other equally. Society becomes unstable when one of these breaks. It is also said that the effectiveness of prison programs without an emphasis on social capital may be undermined (Brown & Ross 2010). Undeniably, social capital, like marriage and employment, is necessary to support an individual but in some situations, either positive or negative social factors might exert no impact on the offender, depending on individual scenarios. Personal factors, such as a willingness to change, are hence seen as the pre-requisite of a transformation journey to foster all-around sustainability (Vaughan 2007). Therefore, there are limitations of the Three-Legged Sustainability Stool, which restrict a thorough understanding of desistance, and another important aspect of sustainability is needed - *personal*.

iv. Personal Sustainability

When the American Institute of Architects (AIA) Academy of Architecture for Justice (2010, p. 3) expresses its view on sustainable justice, it highlights that all penal stakeholders, including offenders, deserve equality, respect and opportunities to change:

‘The physical needs, health, dignity, and human potential of all who come in contact with the justice system are respected and given opportunity to flourish. This applies equally to staff, detainees, visitors, service providers, media, jurors, and court support agencies.’

The desistance literature also clearly shows that not just the social aspect has a significant role to play in desisting, but that personal change is of at least the same importance (Maruna 2001). Recalling the five key factors central to successful desistance that were derived from the literature review above:

- Positive Feelings about Self and Future
- Negative Feelings about the Past
- De-labelling and Recognition by Significant or Respected Others
- Strong Pro-Social Relationships with Society
- Maturation.

These five factors demonstrate that a personal aspect, that explores (positive) personal changes, is necessary to be added to the sustainability context in order for it to be applicable to the complex intersection between personal and social behaviour, and the physical and economic structures of modern prison practice. Hence, in addition to the three aspects of sustainability, I have added one more crucial aspect, personal sustainability, which takes personal factors into the sustainability consideration and will make the model more applicable to correctional practice. It also allows for a more comprehensive analysis and understanding of the processes and activities that can support desistance and configuration of a stable society.

Personal sustainability, sometimes referred to as self-sustainability, is seen as ‘the state of being able to provide livelihood to self and dependents and through self employment, getting a job or even furthering education’ (Muasya 2013, p. 9). It discusses various problems that affect various people in various degrees, such as physical difficulties, income and expenses, networking, mental health issues and emotional management (Cox 2010). Its importance is raised to explain the mental and behavioural changes of an individual (Cox 2010; Muasya 2013) and the need to reinforce human capital that is usually interpreted as ‘the skills and knowledge which an individual possesses’ (Farrall 2004, p. 59).

Human capital entails not only physical skills and one’s level of education. It is similar to the principles of restorative justice in that it supports that:

- a. ‘promoting healing for all affected parties

- b. providing an opportunity for the offender to make amends
- c. empowering victims, community members, families and offenders by giving them a voice and a shared responsibility in finding constructive resolutions
- d. addressing the underlying causes of criminal behaviour
- e. building a sense of community and its capacity for resolving conflict
- f. promoting and sharing community values' (Bazemore & Umbreit 2001, p. 6) are also essential for personal transformation.

Combining the desistance elements and the restorative justice concepts, it is suggested that desistance requires an offender to change not only behaviourally but also cognitively in which motivation is one of the main psychological components encouraging an individual to change. LeBel et al. (2008) raise that if offenders could maintain 'hope' or 'self-efficacy', it is more likely that they can make good use of desirable turning points, like marriage and employment, to advance themselves and to combat non-excessive troubles in their post-release lives. Consequently, assisting released offenders to overcome the social and psychological issues is vital to pulling them out of pessimism and the lure of offending, as well as motivating them to change and stay in a law-abiding circle.

Inspired by the Three-Legged Sustainability Stool then, I would argue that a four-dimensional analysis would better represent individual aspects of sustainability that support desistance and hence stability of society. The next chapter will introduce the rise of sustainable programs in social institutions and subsequent evolution in prisons. Those existing programs inform penal settings of the possibility of making use of nature to design innovative prison programs for more effective promotion of desistance. Several pioneering sustainable prison programs will be discussed. Their corresponding benefits, alongside other literature reviewed in this thesis, will first be identified, then analysed and classified under the four aspects of sustainability in four different lists (see Chapter 5) for later examination across the five key factors of desistance.

Chapter 3 Sustainable Programs in Prison

The literature on desistance demonstrates that it is paramount to help offenders advance in different aspects, especially the personal and social ones, in order to facilitate permanent desistance. While emphasis is usually put on the needs to transform offenders' behaviour or cognitive reasoning, the roles of communities and social relationships cannot be neglected in nurturing offenders' desistance pathways (Casey et al. 2011). Sustainable programs, although still in its infancy in prison, are offering a burgeoning approach to promote desistance via enhancing one's personal and social growth. Inputting the nature-based elements, these prison programs are composed of novel physical infrastructure like environmental design, and social infrastructures such as various kinds of prison operational philosophies and prison staff-offender relationships that may address offenders' needs and 'treat' their problems (Hine, Peacock & Pretty 2008).

This chapter begins with the use of nature-related/sustainable programs or therapies in community settings and then in worldwide prisons. Several leading examples in the realm will be highlighted. The two chosen sustainable programs, TH programs and animal programs, will be defined in the last section, along with the rationales of researching these two programs.

3.1 The Impacts of Nature on Humans

The notion of sustainability and sustainable programs have a strong relation to nature. The impacts of nature in institutions, especially healthcare centres, are seen to be healing, therapeutic and restorative on inhabitants' physical and mental health in many studies (see example Huelat 2008; Ulrich 1999; Van der Linden 2015). It is shown that when nature becomes a means of therapy applied in health care institutions, it could bring positive effects on health, simply by exposing people to the outdoors, gardens, natural or quasi-natural views (Marcus & Barnes 1999; Ulrich 1999), as it offers healing space like 'a sacred spring, a reflective pond, a quiet grove, and majestic peaks' to the residents

(Huelat 2008, p. 1). Lack of exposure to sunlight could also result in higher probability of ‘irritability, fatigue, illness, insomnia, depression, alcoholism and suicide’ (Lieberman 1992, p. 7). Decreasing tendency of depression, reducing stress, improving cognitive functioning and emotional state are some evidenced benefits of exposure to nature on residents of institutions, as well as its visitors and staff who have expressed that they are more satisfied with their jobs at workplaces with garden views (Kaplan & Kaplan 1989; Ulrich 1984; Van der Linden 2015). Beyond healthcare institutions, a study in Texas demonstrates that nature can be effective in reducing boredom and boosting a positive attitude towards assigned tasks in a classroom that can view the outside (Kim 1998). Researchers like Strife & Downey (2009), Largo-Wight et al. (2011) and Gritzka et al. (2020) have further proven the positive effects of nature on improving attention and problem-solving capabilities in educational institutions and workplaces.

Human beings do not just benefit from natural landscape or plants in gardens; contact with animals is also conducive to human growth and is widely adopted in a range of social institutions (Frumkin 2001). Animals have been brought into clinical and non-clinical settings for both children and the elderly (Beck & Katcher 1996; McCardle et al. 2011) to aid recovery and have also been successful in psychiatric populations (Furst 2006; Lee 1987). For the elderly, walking dogs facilitates social interaction and forward-looking conversations among individuals, as well as relieving agitation of Alzheimer’s patients (Hardiman 2010; Pets Are Wonderful Support 2007). It is also reported that children are able to learn about love, feel attached, improve self-perceptions and better their relationships with others (Allison & Ramaswamy 2016; Pets Are Wonderful Support 2007). Nature therefore appears to remind people that ‘humankind evolved in concert with nature, and that environmentalism is a necessity, not a luxury’ (Huelat 2008, p. 2). It always plays a crucial role in the cognitive, emotional and spiritual areas of human development (Black 2015; Frumkin 2001). The above evidence has shown the physical and psychological benefits of connections with nature for humans.

These positive changes can also be observed in sustainable programs that support and benefit offender transformation in prison. Research has indicated that offenders who are exposed to nature show less aggressive and less violent behaviour (Kuo & Sullivan 2001) via simple contact with nature, such as watching birds and absorbing sunlight. When

prisons are constructed in a punitive manner, they become more harmful than healing to offenders (Moran & Jewkes 2014). Bastøy prison in Norway has typified in this area. This environment-friendly prison aims to operate 'under human-ecological values and understanding' (Bastøy Fengsel 2012). It has various methods of practice to help reduce environmental impacts. For example, the prison deals with its own rubbish by utilising a rigorous recycling system; it decreases carbon dioxide emission by using solar for energy, wood fire for heating and horses for transportation on the island. The values that Bastøy prison promotes are ecologically related and restorative based. Building relationships with other people and nature, as well as establishing responsibility and respect are aspects that are emphasised in the prison (Bastøy Fengsel 2012), in addition to gaining skills by doing building maintenance work and making use of wood for energy supply (Moran & Jewkes 2014).

Van der Linden (2015, p. 460) also argues that sustainable programs could offer:

...a form of nature-based therapy to prisoners under the guidance of trained professionals. Offenders typically engage in gardening and horticultural activities, such as landscaping, cultivating plants, green roof gardening, learning about environmental stewardship and caring for nature and animals.

Van der Linden further asserts that these programs could integrate sustainable activities with vocational training and equip offenders with social skills by cooperating with others. While typical educational programs and vocational training are available in most prisons to encourage desistance and reintegration (Drake et al. 2009; MacKenzie 2006; Vacca 2004), Linden and Perry (1983) assert that although educational programs could help inmates advance in learning, such programs may not spontaneously prevent recidivism or support post-release job seeking. Even these programs are conducive to psychological transformation among offenders, this change does not lead to any differences in the post-release period compared to a control group in terms of behaviour (Gallagher 2013; Lewis 1973). Therefore, other measures that embrace nature arguably ought to be adopted by prisons to supplement conventional educational and vocational training programs and to cultivate a more effective environment for transformation, as well as encouraging a desisting lifestyle after release.

3.2 Ranges and Examples of Sustainable Programs in Prisons

Scholars in the realm of prison sustainability state that ‘sustainable prisons are those who reduce their carbon footprint, sustain quality restorative and healing programs as well as teach and practice ecological sustainability’ (Steels 2013, p. 6). Sustainable programs grounded on similar principles should thus move beyond planting and environment-friendly measures like recycling and reducing pollutants. Rearing of endangered species, conservation, and other jobs focusing on environmental protection are typically considered sustainable. Referencing Gallagher’s work (2013), a wide range of jobs are classified as sustainable in this study such as recycling, forestry, horticulture, and community services such as composting and bicycle/wheelchair refurbishment, groundskeeping, dog training and kitchen work because growth and development can be seen among nature, human, communities and economies.

Although there have been limited documented penal settings that actually pay concurrent attention to personal transformation, prison environment and relationships, some countries have started to introduce sustainable approaches partly or extensively in prison to pave the way for the innovative approach to desistance. Some world-success cases that can be spotted in Europe and the US are demonstrating how the holistic development of sustainability in prison could benefit incarcerated offenders and other stakeholders. A range of all-round environmental protection programs in the US, food programs in Australia and community development programs in the UK are outlined below to exemplify the potentials of sustainable programs on offender transformation. These examples contribute to part of the identified benefits that will be categorised into the four aspects of sustainability for mapping across the five factors of desistance in the analysis chapters.

i. The Sustainability in Prisons Project (SPP)

The SPP in Washington State in the US, is a well-known program encouraging sustainability. It was founded by the Washington State Department of Corrections and the Evergreen State College, and aims ‘to bring science and nature into prisons’, as well as to bring scientists, inmates, prison officers, local students and community partners together to conduct ecological research and preserve biodiversity (LeRoy et al. 2012).

Offenders are involved in various sorts of meaningful activities that aim to preserve nature and promote personal growth. For instance, endangered species rearing programs allow offenders to look after animals such as the Oregon spotted frog and the Taylor's checkerspot butterfly. This helps offenders to build empathy, learn skills of managing data and conducting scientific experiments, and contribute to the ecosystem while gaining employment skills and community services schemes that usually conduct natural resources programs. Apart from these hand-on programs, there are other educational programs embraced in the SPP that allow offenders to foster sustainability to different extent. Monthly environmental lectures provide offenders with both practical skills and theoretical knowledge. SPP is comprised of miscellaneous activities and small programs, so it cannot be classified as either a TH program or animal program because both plant growing and animal rearing are also its central focus.

The project co-director, Dan Pacholke, raises the importance of cultivating positive changes on offenders' behaviour and developing better mental, emotional and social states compared to the day they entered the prison. He also argues that SPP is able to lessen 'environmental, economic, and human costs of prisons by inspiring and informing sustainable practices' (quoted in Gallagher 2013, p. 1). Ulrich and Nadkarni (2009) also claimed SPP to be an effective collaborative education of environment for offenders. Not only being able to provide participants opportunities to undertake placements of conservation and restoration work, the program has also reduced operational costs and carbon emission by about 40 per cent since 2005 (Warner 2013); hence sustaining offenders, the prison and the community economically and socially. Despite that, with all the extensive activities and structures, in-depth research that evaluates the effectiveness of this novel approach on desistance is still scant, the operation of SPP has provided a significant exemplar to this thesis and will be referenced throughout the analysis.

ii. The Albert Park Prison Project and the Inside Out Trust Program

There are programs that concentrate on connecting the prison population with the outside world while also aiming to support community development. Two famous community-centred cases are chosen here. In the northeast of England, the Albert Park prison project was found to be effective in strengthening relationships and improving perceptions

among community social groups (Goulding, Hall & Steels 2008). In the early 2000s, this project was initiated because the local community lacked professionals to refurbish a park. A group of offenders were then involved in the local renovation. In addition to repairing children's play areas, they also helped with miscellaneous tasks inside and outside prisons, such as building tables for the prison café, decorating the visitor centre, re-establishing a boat in the workshops of a local prison, and constructing railings for ornament (Stern 2005). The Director General of Prisons in the UK publicly praised the work done by offenders in the Albert Park project and recognised their contribution. He never hesitated to demonstrate his hope towards offenders, which is a key factor that could help offenders to desist from crime (Maruna et al. 2004; Trice & Roman 1970). A local university evaluated the project by interviewing the offenders and community members. Both sides gave positive comments toward the project and asked for more work of this kind from the prison (Coyle 2008). The offenders felt they could finally impart benefits to the community and were pleased with themselves while community members recognised their contributions and encouraged them to proceed further. This pilot project ended in 2004 and has been expanded to other prisons in the UK, contributing to its excellent reputation and outcomes.

Another prevalent project, Inside Out Trust program, which connects charities and community organisations (that have particular needs) and offenders (who can help to fulfil these needs) (Inside Out Trust, 2005), has gained satisfactory comments from offenders themselves and staff across the UK. Offenders were helping, for instance, to refurbish wheelchairs, bicycles and computers for charities or NGOs. More than half of the participants thought that:

...they had learned new skills. Most staff also viewed their work positively, fitting in appropriately with the goals of the prison, and helping to develop links with the outside community. Both staff and prisoners commented that the work had a positive impact on the environment and relationships within the prison (Dhami, Mantle & Fox 2009, p. 442).

It is evidenced that the participants considered community work as constructive, which could provide them with a chance to help other people, to pay back for their criminal

behaviour and as a way to nurture the future (Coyle, 2002). Simultaneously, the prison staff and community groups also appreciated and recognised their effort to contribute to de-labelling of offenders and encouraging desistance (Maruna et al. 2004; Meisenhelder 1977).

iii. Miscellaneous Food Programs

Prison food programs have become slightly more commonplace in Australia in recent years. Not a great amount about these food programs is advertised, yet some of the evaluated ones have shown preliminarily satisfactory results. In NSW, there is a self-sufficient food program called ‘Grow Your Own’ running in several prisons across the state (Chettle 2014), where participants grow and prepare food for themselves and their peers in the program. A wide range of food can be manufactured, depending on the characteristics and inclinations of each prison. Many of them grow vegetables like broccoli and potatoes while some prepare meat, bread and dairy products.

Authorities have said that the program is saving a huge amount of money for the government and taxpayers (AUD\$4 million per year) (Chettle 2014). But of equal importance, it provides participants with vocational training opportunities and skills, as well as reducing the carbon footprints of both the prison and the state since fewer trucks are needed for transporting the food to different prisons, which are usually far from each other. Participants have reported benefits gained from the program such as enriching their prison time, equipping them with employable skills and helping out their communities via food preparation (Munro 2014). A Tasmanian prison also has a similar program that grows vegetables but the participants are not growing for themselves. The vegetables are sent to a community centre nearby, mainly for children who are in need. The then Correctional Manager of the prison asserted that the program could relieve community needs and allow offenders to pay back the community (Shannon 2016). On top of serving the needs of local organisations and other state prisons, stronger connections could be built between prisons and outside communities, as well as between prisons and prisoners. Moreover, the food programs could demonstrate to the public that prisoners have the ability to help the economy by being self-sufficient and proving themselves to be employable instead of wasting taxpayers’ money. Their public images could be somehow ameliorated at the meantime, which is also an important trait of desistance (Maruna et al.

2004).

Although sustainable programs are not new in prison, they continue to be underutilised, possibly because the evaluations of these programs are not systematic, and research in this realm is scarce in most countries. Apart from understanding the potential benefits, there is no linkage towards facilitating desistance, thus an important opportunity to inform the actual impact of these programs on desistance is missed, a gap this thesis aims to address. However, there are two considerably more researched sustainable programs that will be the target programs of this thesis: TH programs and animal programs. They are more widely implemented in prisons around the world and have been studied more often and more systematically, hence lending themselves to the analysis and theoretical application undertaken as part of this thesis.

3.3 Therapeutic Horticulture (TH) Programs and Animal Programs in Prison

As the most frequently reviewed and researched sustainable programs, TH programs and animal programs are utilised in this thesis to demonstrate the effect and importance of promoting sustainability in prisons from a new perspective. A considerable variety of these programs are being adopted in many countries, differing in aims, operations and outcomes. Since the initial implementation in prisons in the 1980s, TH programs and animal programs have been a particular focus of prison sustainable practices. A range of evaluations and research on these programs show that they are effective with helping offenders to rehabilitate or change towards a pathway of desistance while they are in prison and facilitate personal growth (Beseres 2017; Gallagher 2013; Little 2015). Most of them are able to benefit offenders in diverse areas, such as gaining self-esteem, increasing employability, bettering communication skills and improving relationships with people around them (see for examples Britton & Button 2005; Cooke & Farrington 2016; Furst 2011; MacCready 2014; Passarelli 2017). The sections below will present the use of these two types of relatively well-structured and broadly-implemented sustainable programs in prison.

i. Therapeutic Horticulture (TH) Programs

Horticulture has been used as a means of healing, recovery and rehabilitation in many institutions, including mental health hospitals, elderly centres, primary schools and

prisons for centuries (Diehl & Brown 2016). In the past, horticulture programs only included people with physical rehabilitation. Around the late 1700s, there was an American psychiatrist, Dr Benjamin Rush, who first recognised and documented the positive impact of horticulture on people with mental health issues, such as shorter recovery time (Diehl & Brown 2016; Jiler 2009; MacCready 2014). After the Second World War, the US built hospitals for veterans and adopted horticulture programs as occupational therapy to heal thousands of patients (Lynn 1993). To date, horticulture has been recognised as a therapeutic approach to help vulnerable individuals with disabilities, and mental and physical illness in different social settings (see examples Allison & Ramaswamy 2016; Yao & Chen 2017). Its use in prisons is not a new idea. Some researchers describe horticulture within prisons ‘as old as correctional facilities themselves’ (Richards & Kafami 1999, p. 186). Offenders were assigned to grow food mainly in horticulture programs for reducing daily operational costs. Until the 1960s and 1970s, concerns about individual rights and exploitation emerged, leading to the decline of prison horticulture (Lewis 1996; Richards & Kafami 1999) but there was a growing number of research studies supporting the benefits brought to offenders by horticulture in the 1980s (Richards & Kafami 1999). Nowadays, it is widely suggested that implementing horticulture programs in prisons could help offenders to address the underlying causes of offending (MacCready 2014).

In a horticulture program, essential activities entail ‘cultivation, thinning, watering, weeding, sowing and harvesting’ (Stigsdotter & Grahn 2003, p. 41). TH programs and horticulture therapy are the most popular terminologies applied by institutions. Nevertheless, the boundary between therapeutic horticulture *programs* and horticulture *therapy* is usually blurred in practice (Sempik & Adevi 2013; Sempik, Rickhuss & Beeston 2014). This thesis will draw a clear line between the two activities. The American Horticultural Therapy Association defines TH *programs* as:

...a process through which participants strive to improve their well-being through active or passive involvement with plants and plant-related activities. In a therapeutic horticulture program, goals are not clinically defined and documented, but the leader has training in the use of horticulture as a medium for human well-being (Diehl & Brown

2016, p. 2).

while horticulture *therapy* is seen as:

...the engagement of a client in horticultural activities facilitated by a trained therapist to achieve specific and documented treatment goals. AHTA believes that horticultural therapy is an active process that occurs in the context of an established treatment plan where the process itself is considered the therapeutic activity rather than the end product (Diehl & Brown 2016, p. 2).

This study focuses on examining TH programs as most prisons do not have a licensed therapist assisting the operations of the program. The common practice is to have a few prison officers (can be either custodial or non-custodial) on site to supervise and maintain order or volunteers to assist incarcerated participants (Cannizzo 2010; Kaye et al. 2015). In some countries, like Indonesia, offenders are supported by a local NGO to supply vegetables to their peers for daily consumption via organic gardening in prison (Topsfield 2015). Participants mostly rely on themselves to maintain the garden with occasional assistance from the NGO. Some prisons hire experts in horticulture from outside to teach offenders to plant while some seek volunteers to run the programs. For example, the program, Lettuce Grow organised by Growing Gardens, an NGO in Oregon, recruits a group of volunteers on site to teach offenders gardening and horticulture education (Growing Gardens 2017). Another instance, the prominent Sustainability in Prisons Project (SPP) in the US has a mixed approach (see more Section 3.2). As the Evergreen State College and Washington State Department of Corrections collaborated to operate SPP, the program had a great diversity of staff members from both organisations. Offenders can work with academics and governmental officials other than simply prison staff. There are also other external community partners/organisations supporting the project, hence SPP has facilitators both inside and outside prison (LeRoy et al. 2013). Not only in the US or Europe, Asian countries such as Indonesia also possess TH prison programs and it is nearly impossible for them to have a consensus about how to define or organise horticulture programs in prison. Although the operations of TH programs may be different to a small extent, the main philosophy is similar: utilising plant growing as a tool to facilitate person transformation (Holmes 2017; Sandel 2004).

Horticulture programs, being one of the most historic sustainable programs in the world, often integrate job and life skills training, literacy and computer knowledge. They encourage participants to transform while taking care of the environment by looking after plants. Participants of these programs have generally stated that gardening workshops help to increase self-esteem and self-worth, as well as lowering the tendency of risk-taking behaviour, improving decision making strategies and bettering psychosocial functioning as a whole (Van der Linden 2015). The programs could reduce the degree of anxiety, depression and aggression, learn practical skills, understand the significant role of plants in the human world and reconstructs their lives (Van der Linden 2015, p. 5). The ultimate goal is to teach participants to become responsibility-taking, not only towards their previous crime but also to their living environment and nature, hence reducing the chance of reoffending. The Garden Project in San Francisco was found to result in only a 24 per cent recidivism rate while the then county average was 55 per cent, thus being claimed by the County Sheriff as ‘a tremendously effective crime-prevention program’ (Van der Linden 2015, p. 5).

ii. Animal Programs

Having similar ideas as the gardening programs, animal programs allow offenders to grow and connect with the outside communities by taking care of other species. In Australia, most states have been running animal programs, especially dog programs, with different structures. Dogs are the most commonly involved animals in many prison animal programs. Collaborating with local NGOs such as the RSPCA and Animal Aid, prisons bring in abandoned dogs for retraining pertaining to the fact that they may not be suitable for adoption due to behavioural problems caused by previous experiences. The participants help to prepare the dogs for adoption (Kalache 2013; Ratnam 2013). The service manager of one of the involved prisons claims that the program gives incarcerated offenders a chance to pay back to the community and make their prison time meaningful (Ratnam 2013). For example, the dog training program in Southern Queensland Correctional Centre provides advanced training to dogs that could become assistance dogs for disabled people (Lyne 2013). There are other kinds of animal programs in other countries like Switzerland, Japan and South Africa, which involve a greater diversity of

animals, including cows, pigs and horses (Gallagher 2013). They are described as ‘highly therapeutic and rehabilitative’ and very beneficial to offenders in many perspectives (Gallagher 2013, p. 19).

While there is an abundant amount of TH programs and animal programs around the world, this research largely draws examples from the US and UK as these programs are more well-documented and -evaluated. There are therefore more research journals and theses providing more in-depth and continuous understanding of the programs. In other countries like Australia, most sources come from news articles instead in which only general information of the programs is revealed. Hence, this research refers to a greater extent to the more high-profile American and British programs which are able to provide more data for analysis.

Conclusion

TH programs and animal programs place emphasis on personal growth and a desisting lifestyle of offenders’ future and their contributions to society rather than the number of recidivists or re-arrests, which can be varied according to different countries, laws, rules and methodologies. Exposing incarcerated offenders to nature and allowing them to take part in sustainable programs is arguably helpful for enhancing sustainability in prison and communities. In the last two decades, sustainability has become a ‘broad multi-focal agenda (McKenzie 2004, p. 1). It is not only about the environment, but also about society, the economy and every individual of the community. In addition to organising traditional rehabilitation programs to boost offenders’ understanding of the harm caused by their offense or to bring offender, victims and the community together, TH programs and animal programs can further transform offenders and their relationships to self and others via learning and working with plants and animals. These programs are nature-based and deemed to be helpful in offering offenders a calm area for reflection and change, as well as establishing a bond with the environment, other species, and the community. They enhance personal growth and encourage responsibility-taking by sustaining the environment, nature and communities, as well as economies.

Although most research has explored the sustainable benefits yielded by TH programs and animal programs in general, none of these have built a link between sustainability in

prisons and desistance, which should be a vital, if not the ultimate aim, of offender rehabilitation. Most of the existing sustainable programs have not been systematically studied or evaluated; many of these studies concentrate on proving psychological, physical and social benefits respectively instead of analysing these characteristics with the core aspects of desistance theories. For example, if the aims of a sustainable program are to boost one's employability and social skills, it is then necessary to explain their connections with desistance in order to examine to what extent these benefits contribute to facilitate desistance in prison. A clearer analytical framework thus needs to be developed in order to portray a more distinct picture of the impact of the sustainable benefits on offenders' desisting journeys. In this thesis, this research gap is filled by addressing what benefits sustainable programs can bring to offenders and societies, as well as why these benefits can or cannot be conducive to desistance.

This research will explore this area of study by framing the reported benefits of TH programs and animal programs into four identified aspects of sustainability: personal, social, environmental and economic and then linking them to the five newly derived key factors influencing desistance, which have been continuously found to impose vital influence on sustaining a desisting lifestyle (Farrall & Calverley 2005; Laws & Ward 2011; LeBel et al. 2008; Maruna 2001), in order to explain the links between each identified benefit of the two sustainable programs and desistance.

Chapter 4 Methodology

This thesis adopts an inductive approach to explore how sustainability can impact desistance facilitation by examining the strengths and weaknesses of the two selected sustainable programs (i.e. TH programs and animal programs) across experiences of different groups of interviewees. This research aims to discover the relationship between promoting sustainability and desistance, as well as the possible benefits and issues that can be brought by implementing sustainable programs in Australia's prisons.

There are different types of sustainable programs existing in prisons across the world. TH programs and animal programs, the two most well-developed and nature-oriented were selected for thematic analysis. The main sources of data collection stemmed from secondary materials and interview transcripts. While reviewing various secondary documents, reports and journal articles published by NGOs, governments and universities, the potential benefits and issues of existing sustainable programs were acquired comprehensively for analysis. Worldwide experiences of TH programs and animal programs were sought to explore the witnessed or experienced changes for offenders. To gauge the actual impact on desistance, I interviewed three groups of stakeholders (i.e. previously incarcerated participants, ex-prison officer and expert interviewees), who had experiences of working for sustainable prison programs, to engender a greater understanding of the benefits and issues of sustainable programs. All the collected data were categorised into theoretical themes according to the four-aspects of sustainability (i.e. personal, social, environmental and economic) and analysed with the five key factors of desistance (i.e. Positive Feelings about Self and Future, Negative Feelings about the Past, De-labelling and Recognition by Significant or Respected Others, Strong Pro-social Relationships with Society, and Maturation) to explain the emergence of positive outcomes and potential problems resulting from sustainable programs. The analysis reveals the relationship between the programs and desistance, as well as informing improvements on implementing sustainable programs in order to maximise their benefits to offenders and communities. Ethics considerations and

limitations of this research will also be detailed in this chapter.

4.1 Data Collection and Analysis

Three stages of data collection and analysis are included in this thesis: desk review, thematic analysis and mapping/interpretation of data.

4.1.1 Stage 1 Desk Review

Desk review is a type of secondary data analysis. It is used for reviewing existing research findings to gain a better insight of the targeted research area (Victorian Government 2020). Typical procedures of the review include scanning literature, analysing secondary data and creating a reference list of reviewed materials (Abt Associates 2014). The purpose of this desk review is to identify the merits of TH programs and animal programs in penal settings in order to explore how these programs may positively affect desistance facilitation. The data itself does not relate to desistance since there has been no research connecting sustainable programs with desistance. Instead, it may be relevant to any kind of benefits about offender rehabilitation and transformation, which will be testified by interviewees' testimonies in the final stage of analysis. This desk review gathers results of 65 studies to delineate the influences of sustainable programs on offenders' behaviour and thoughts, and to formulate more precise research questions.

- Use of Secondary Materials

Primary sources are authentic with realism, yet time limitation and access difficulties could be an obstruction to obtain primary materials (Kraska & Neuman 2008). Desk review on the other hand can address some of these limitations by accessing a wide range of existing sources of information that has been collected by other researchers but serve different research aims of this study (Davies, Francis & Jupp 2011). Secondary sources ordinarily include reports, organisational records, diaries, letters and documentary resources (Davies, Francis & Jupp 2011, p. 100). These sources can assist researchers in constructing and explaining social phenomena. For instance, criminal statistics are one of the most common types of secondary data being used by criminological researchers. A presentation of trends, especially on the offences that are well reported and recorded, can be constructed by these statistics (Davies, Francis & Jupp 2011). Similarly, information

related to the most documented sustainable programs is required to explain desistance at a deeper level.

Secondary documentation is therefore an effective data collection method for this study since it outlines an overview of sustainable programs in various countries alongside corresponding operational details and evaluations. This research gathers information for investigating the benefits resulting from sustainable programs around the world. Sustainable programs are being developed in many places, including, but not limited to, the US, the UK, Scandinavia and Australia. They encompass a vast range of activities related to sustaining functions and stability of the environment and communities such as having a food production program to offer free food to community members in need (Shannon 2016). There is no universal definition or guideline about how a sustainable program should be carried out in each prison, owing to the variances among each penal system. Many researchers, policymakers and NGOs have studied different prison practices to a certain extent. Nonetheless, evaluations or investigations are usually not continuous or in-depth enough. They may have introduced the positive changes yielded by sustainable programs either reported by the offenders themselves or their family members in which “why” and “how” the programs can lead to those positive results are rarely explained (Jiler 2009; Kaye et al. 2015; MacCready 2014). Even for the frequently studied programs like the SPP in Washington State prisons, a report published in 2012, presenting the effectiveness of SPP from 2004 to 2012, largely focused on reporting resources saving and success in conservations (LeRoy et al. 2012) instead of offenders’ growth. Since each program has been subject to limited research, it is not reliable or thorough enough to access only one or two particular prisons and to assess their programs as there could be just one program available in each prison, narrowing the scope and validity of study. However, due to time and resource constraints, it is an insurmountable challenge to locate and identify the potential interviewees with these highly specific experiences or expertise across different countries or jurisdictions. This is the major reason I have avoided accessing primary sources in prison, besides the complicated and long process of gaining prison access approvals. Exploring multiple programs with similar objectives could on the other hand demonstrate broader insight into those well-developed cases and relevant testimonies in different nations without the need to access all those prisons in person. Many research studies and reports evaluating sustainable

programs in diverse areas are publicly available and easy to access. These studies are conducted by professional researchers or academics, thus providing data with high quality control and validity (Arber 2001). Also, these available data sets collected by other researchers tend to be much more substantial than that acquired by one single researcher (Arber 2001). Gathering data from these publications can obtain all-round materials for innovative and comprehensive analysis of the impact of the two programs and their connections with desistance.

Desk review also helps to sort out programs that are the most frequently reviewed and prevalent for analysis. Since the universal definition of ‘sustainable programs in prison’ is absent, it could embrace a huge range of activities, such as refurbishing furniture, doing kitchen work and planting. The main motivation for drawing on TH programs and animal programs is that they are more established in many prisons around the world and accordingly there are more analysis and evaluations done on them. These two programs are nature-oriented as plants, animals and the environment are treated as the major medium of interaction. Both focus on taking care of the most natural living things on earth other than humans. This could then begin to transform the participants through interacting with non-human beings like animals and plants, and thinking for these species and hence transforming a person from self-interested to more altruistic (Steels 2013). Empathy, which is likely to be cultivated throughout the process, could also be aroused in the interaction with other human beings (LeRoy et al. 2012). Animals and plants are then the most original manifestation of ‘nature’ and the optimum medium to promote ‘sustainability’. After reviewing over 100 articles related to ranges of sustainable programs, TH programs and animal programs were found to be evaluated the most and applied the most widely. The wealth of existing research enriches the data collection process, and the notable gap manifested in the literature provides fertile ground on which to expand the discourse.

Among the reviewed literature related to TH programs and animal programs, the most studied and reviewed ones were highlighted to a greater extent as there have been more systematic research done on them, enhancing reliability of program outcomes. Sixty-five of the reviewed articles, which had thoroughly researched the two programs, were used for analysis (shown in Table 5.1) and the summaries of analysis will be presented in

Chapter 5. The US has the largest amount of evaluated or published TH programs and animal programs amongst all countries that run these programs in prison. Therefore, the data used for analysis is largely sourced from US practices in which several are claimed to be more prominent and successful and receive the greatest worldwide attention. For instance, the SPP in all Washington State prisons, Insight Garden Program at San Quentin Prison (IGP), GreenHouse/GreenTeam Programs in Rikers Island, the Green Prison Project in Ohio and the Garden Project at San Francisco County Jail. A large proportion of TH programs' data was drawn from these examples due to the abundance of studies done on them. For animal programs, I provided examples mainly from the US, Canada and Australia considering the availabilities of existing materials, including journal articles, media articles and organisational reports. Although TH programs and animal programs were introduced in prisons as early as the 1980s, the programs were rarely reviewed or studied in detail in the years soon after their implementation. All the reviewed sources were thus dated from the 1990s.

Research papers, government reports, organisational studies and commentaries were chosen to be the chief origins of secondary data of this study. An accumulating body of research related to international TH programs and animal programs in prison is available. 'Prison horticulture programs', 'prison garden programs', 'prison pet programs', 'prison dog programs', 'prison canine programs' and 'prison animal programs' were used as the keywords of the search. The dates of publication varied depending on the dates of commencement and evaluation of each individual program, ranging from the 1980s to 2010s. This data collection method allowed me to capture the most successful and representative programs with ease and at the same time explore the less well-known and under-evaluated ones, aiding in formulating more subtle research questions and interview questions. Furthermore, the international data set could help to identify key issues of the political and cultural aspects in the penal development that Australia might learn from. There are many variances and similarities between Australia and other countries that implement sustainable programs, in terms of political climates, cultural beliefs and penal preferences. Uncritically duplicating any of these would hamper rather than benefit the Australian public. Access to more international examples helps to identify potential problems of implementing sustainable programs in prison more broadly and is therefore conducive to cultivating an approach suiting the needs and conditions of Australian

society. The early-developed programs could help to scrutinise the effects new programs might have and the possibility of introducing them to a further extent in Australian penal practices via analysing their benefits and associated issues with desistance theories. The desk review provided basis for the next stage of work (Sandison 2003) so that sustainability and desistance promotion in prison can then be interpreted from an original perspective and depicted in a multidimensional manner.

4.1.2 Stage 2 Thematic Analysis

The data collected from the desk review was then themed in the second stage of analysis. The literature review (Chapter 2) highlights four aspects of sustainability (i.e. personal, social, environmental and economic) that are significant to studying prison sustainable programs and desistance. After the desk review distinguished a set of reported benefits of TH programs and animal programs on offender transformation, a thematic analysis was needed to codify the data before the examination of their influences on desistance can be carried out in the final stage of analysis.

4.1.2.1 Definitions and Applications

Thematic analysis is an approach of ‘identifying, analysing, and reporting patterns (themes) within data’ (Castleberry & Nolen 2018; Jewkes & Moran 2015). It divides the database into single units (Lincoln & Guba 1985) for categorisation. Identified categories are then analysed to develop the overarching themes of the study (Kiely 2017). It is utilised for assessing the data given by different groups of interviewees, comparing similarities and differences of their experiences of certain topics and discovering unprecedented insights in the field (Nowell et al. 2017). Although thematic analysis helps to sort out key features of data for analysis, its objective is not summarising qualitative data but pinpointing and interpreting major features of the dataset informed by the research questions (Clarke & Braun 2017).

An essential point to recognise is that thematic analysis does not restrict the development of research questions, which means they are subject to change during the coding process or theme development (Clarke & Braun 2017). It allows flexibility in processing data since ‘the search for, and examination of, patterning across language does not require

adherence to any particular theory of language, or explanatory meaning framework for human beings, experiences or practices' (Clarke & Braun 2013). Such flexibility means that thematic analysis suits a wide scope of research paradigms in which both data-driven (inductive) and theory-driven (deductive) analyses are possible. Interview transcripts and secondary data can be processed simultaneously regardless of sample size. Other social scientists have applied deductive thematic analysis to test whether a series of virtues of positive psychology exist in several African conventional religions (Selvam & Collicutt 2013). By the same token, the benefits brought by sustainable programs identified by the literature were themed and examined by interviewees' testimonies in accordance with the five key factors of desistance. Instead of just summarising the reported benefits from literature, they have been coded and deductively allocated into four categories of benefits (i.e. personal, social, environmental and economic) and compared with the five key factors to test to what extent the programs could influence incarcerated participants' journeys to desistance and whether key factors would emerge to stimulate desistance during participation in the programs.

There are two themes in thematic analysis: semantic and latent (Braun & Clarke 2006). Semantic themes refer to the situation that the meanings of data are explicitly being raised and discussed and no further exploration of information will be conducted. The latent level looks at the underlying ideologies or conceptualisations of data that have shaped the emergence of semantic themes. As the thesis explores the elements needed to facilitate desistance, latent analysis is significant in revealing the root causes of changing an offender. Lots of studies have outlined the semantic benefits of sustainable programs but the latent explanation of these outcomes is scarce. They have asserted that sustainable programs can foster changes of behaviour and rehabilitation but the reasons why this could happen still need to be meticulously scrutinised prior to convincing the public what actually works in prison. Based on the information coded in the secondary data, each coded benefit of the programs is then applied across the interview data to investigate its level of success on desistance, and to explore the corresponding relationships between sustainable programs, sustainability and desistance. Moreover, the analysis helps examine how Australian stakeholders perceive the two programs and address the potential and practical issues of adopting them in Australia. An Australia-dedicated approach in prison could then be outlined.

4.1.2.2 Coding Process

Braun and Clarke (2006) have developed a six-phase framework for conducting thematic analysis, which clearly introduces how codes and themes can be generated systematically. If the prior stage has not been addressed properly, the coming one is unable to proceed well. This framework has offered a series of structural procedures to direct the analysis of this research.

- *Phases I and II. Familiarisation with the Data and Coding*

The first step is *familiarisation with the data*. This is a fundamental and crucial procedure to ensure the researcher is familiar with the data through reading and re-reading them before coding. Prior to actual coding, I read through the transcripts three times to familiarise myself with what I have collected so that the use of codes could be more precise. The next phase is *coding* which reduces a dataset into smaller bunches guided by the research questions (Clarke & Braun 2013). NVivo 10 was utilised to code the data. Data-driven coding was predominantly used in this research. It puts in new components to broaden the variety of relevant features for analysis. These codes originated from secondary materials, they are particularly valuable since a series of matters that researchers have never anticipated could be reflected and derived (Hennink, Hutter & Bailey 2011), emphasising the diversity and uniqueness of data. Normally new codes could come from all channels other than academic work. In this research, transcripts of released offenders, ex-prison staff and other expert interviewees could all be the origin of a new data-driven code. Yet, in this case all interviewees' testimonies did not include new codes. Most of their data could be put under the codes developed by a comprehensive range of secondary sources and they were mainly used for cross-examining the data with desistance theories. A codebook was used for recording all code definitions and were redefined if new codes occurred. Some of the codes were combined to form a new code. For instance, 'educating offenders about love' was combined with 'teaching offenders to care about others' to become 'being altruistic', as both of the two original codes presented a shift of self-focus to caring for other people. The coding process was stopped when no new codes could be singled out from data or when all the relevant data had been coded.

- *Phases II and III. Searching for Themes and Reviewing Themes*

Finding themes is the third stage of thematic analysis. Braun & Clarke (2012, p. 63) assert that a theme is ‘a coherent and meaningful pattern in the data’ relevant to the research questions. Developing themes require the researcher to single out similarities among the coded data. I have collated all the codes in accordance with each theme (developed from the four aspects of sustainability). Some of the codes might contribute to more than one theme while some might be conducive to one only. It was unnecessary that each single code merely fitted into one theme. Some codes might be located to only one aspect of sustainability but some other could be instrumental to two or more aspects. For example, the code ‘being altruistic’ does not only belong to personal sustainability. While this can manifest a kind of internal growth of an individual, it also teaches offenders the concept of commonality and common interests, which are beneficial to communities. Therefore, this is not just a contribution to personal sustainability but also an advancement in social sustainability. *Reviewing themes* is a step of checking whether the identified themes are capable of revealing a convincing truth of the data. The connections between the themes and desistance were preliminarily established while reviewing to ensure the analysis of themes would be able to answer the research questions.

- *Phases IV, V and VI. Defining and Naming Themes and Writing-Up*

The fifth procedure is *defining and naming themes* which gives the themes a punchy definition and linkage to the research questions. Each theme has to be analysed and informs what story it is trying to tell and how it plays a part in reaching the research aims (Clarke & Braun 2013). Fundamental definitions of the theoretical themes (developed from the four aspects of sustainability), which have been defined and shown in Tables 5.2–5.5, were revised after coding for clearer understanding of the major themes of the topic. Since many codes about personal benefits were identified during the coding process and they were found to represent personal benefits to different areas and levels, two subthemes (i.e. psychological benefits and physical benefits), were developed under the umbrella theme ‘personal benefits’ to further distinguish the significance of these two kinds of personal benefits. All the codes were fitted into the four themes for analysis.

The final phase is *writing-up* which ‘involves weaving together the analytic narrative and (vivid) data extracts to tell the reader a coherent and persuasive story about the data, and

contextualising it in relation to existing literature' (Clarke & Braun 2013). Under the thematic analytical framework, the data corpus can be classified and analysed efficiently and fairly with limited influences by the researcher (Braun & Clarke 2006). The connections between sustainability and desistance can then be systematically explored in light of the four themes of benefits, guiding future development of sustainable programs.

4.1.3 Stage 3 Mapping / Interpretation of Data

Critically analysing existing research of TH programs and animal programs in the thematic analysis aims to inform their important impact on desistance, framed by four themes of benefits derived from the four aspects of sustainability. Mapping the data set, which entails research findings and testimonies of the 65 secondary sources, with the five key factors of desistance and scrutinising interviews' data formed the third stage of analysis. The causation relationships between desistance and each of the four aspects of sustainability were examined comprehensively at this stage of analysis, which would explain how a positive impact can directly lead to desistance and explore benefits that were reported to be positive but did not really appear to be useful in helping offenders to desist, in order to investigate whether sustainable approaches should be universally implemented in prison to facilitate desistance and possible improvements in applications.

4.1.3.1 Semi-Structured Face-to-Face Interview and Written Responses

Before the data can be mapped across desistance theories, fieldwork was done with three groups of interviewees to verify the processed data. A crucial issue of relying on secondary sources in this case is that much of the materials are from the US or Europe. The most well-established sustainable programs like the SPP, the Inside Out Trust Program and the GreenHouse Program are all found in Europe and the US. Australia's circumstances are not sufficiently documented in many cases. Perspectives of Australian stakeholders are hence important in highlighting outcomes of the programs and national characteristics to develop a dedicated sustainable approach to the country. The best way to reveal the reality in prison is to directly talk to the people familiar with prison operations. Hence, interviewing local parties who have been involved in sustainable programs can provide insight into what happens in prison, as well as the benefits and problems of implementing this approach in Australia according to interviewees' personal experiences. Self-reported transformation by the (released) offenders may not be strong

enough to understand sustainability and desistance from a multi-dimensional perspective as they may not have changed according to their own expectations or descriptions. In some instances, there could be issues, such as operational and administrative problems, that offenders are not informed of and this may lead to biased perceptions on the programs. This thesis thus interviews previous prison staff, program facilitators and scholars in the prison field, as well as released offenders to obtain diverse opinions and to reveal the most realistic influence on desistance caused by sustainable programs through empirically testing the secondary data sets. Since Australia does not significantly implement sustainable programs, related interviewees were more difficult to find (see section 4.3). I have thus included US-based interviewees with relevant experience and expertise in some of the reputable programs to increase the diversity of data collection.

Participating in one-to-one interviews allow interviewees to freely express their points of view regarding the impact of programs, design and modes of operations and other services provided by the prison. Interviewers and participants could carry out meaningful interactions instead of just robotically asking and answering the questions throughout the process, enabling in-depth interviewing to become 'a special kind of knowledge-producing conversation' (Hesse-Biber & Leavy 2006, p. 128). Unlike structured interviews which schedules every question in sequence and expects no deviation from the script, the semi-structured one allows spontaneous follow-up questions and lets the interviewer record emotional cues, such as non-verbal expressions and fluctuations in vocal tones, thus assisting the interviewer to interpret authenticity and sentiment of the respondent (Tracy 2013). Semi-structured interviewing is preferable across the interviewing process primarily because flexibility and depth can be guaranteed (Tracy 2013). Since new topics or ideas that the researcher has not considered before could be brought up by participants, a highly structured approach could impede interviewers from further clarifying or exploring unanticipated themes. As this research aims to capture personal experiences and perceptions of ex-offenders, ex-officers and practitioners, diversity and depth of information would be greatly limited if it lacks flexibility. Interviewees could narrate their stories without being bound by structured questions. By capturing interviewees' voices and words, the benefits and issues of the sustainable programs they have experienced could be more thoroughly understood (Hennink, Hutter & Bailey 2011). Moreover, in-depth semi-structured interviewing offers the interviewer

and interviewees a platform to discuss a specific topic in depth, even a sensitive and highly confidential one. Not only offenders, but also staff members have scarce opportunities to speak out or comment on the living conditions and/or services offered by prisons. Most often, only authoritative figures such as the prison management, governmental officials or prison service inspectorates have a say in these regards. As an outsider and former ‘insider’ of the prison who have a good understanding of the prison and sustainable programs, the words from released offenders and ex-prison staff are substantial, as they are ‘independent’ individuals to comment on these aspects without the concerns or stress that current offenders or prison officers potentially encounter. Expert interviewees, such as program facilitators and scholars, also come with great autonomy to opine, adorning the scope of the thesis.

To guide the interview, there was a series of open-ended questions related to sustainable programs in prison that the interviewees possess knowledge of or experience with. Each interview lasted between 45 and 80 minutes. Participants were asked to describe their experiences and opinions of the impact of the programs on offenders, including but not limited to behaviour and cognitive wellbeing. Table 4.1 indicates the three groups of interviewees and their roles in the sustainable prison programs, ranging from previously incarcerated participants, ex-prison officers to expert interviewees. Each group received slightly different questions. For previous participants, the interviews included three areas of questions: their participation in the program, their perceptions towards changes in themselves and other people around them, as well as the obstacles and facilitators of desistance in their life. Their first-hand experiences, observations, perceptions and opinions were thoroughly examined. For ex-prison officers and experts in the field, they were asked about their observed changes on offenders who had taken part in sustainable programs, the rewards or difficulties offenders had encountered in the journey to desistance and the socio-political issues of implementing sustainable programs more universally in Australia. The major variation with the questions for previous participants is that the ex-officers and expert interviewees were asked to detail more of the operational perspectives such as administrative problems, funding issues and political concerns that might not be known by program participants. Additionally, some of them had served in the field for a long time, this allowed new topics beyond theories, particularly the current socio-political interventions in Australia’s penal system, to be raised by these experts.

One point to note is that data given by all three groups are of equal significance, no matter if it is based on observations or experiences. The information given by previous participants is no less important than the opinions from authoritative figures, like ex-prison officers and program facilitators.

Table 4.1 Codes of interviewees

Categories of Interviewees	Code (Country)	Gender	Description
Previous Incarcerated Participants (P)	P1 (AUS)	M	Participated in a TH program
	P2 (US)	M	Participated in an animal program
	P3 (AUS)	M	Participated in a TH program
	P4 (AUS)	M	Participated in an animal program
Ex-Prison Officer (O)	O1 (AUS)	M	Organised and monitored TH programs
	O2 (AUS)	F	Facilitated TH programs
	O3 (AUS)	M	Organised and monitored TH programs
	O4 (AUS)	M	Facilitated animal programs
	O5 (AUS)	M	Facilitated animal programs
Expert Interviewees: Program Facilitators, Practitioners, Researchers, Volunteers (E)	E1 (AUS)	M	Studied/facilitated/monitored TH, animal and other sustainable programs
	E2 (AUS)	F	
	E3 (US)	M	
	E4 (AUS)	M	
	E5 (AUS)	M	
	E6 (AUS)	F	
	E7 (AUS)	M	
	E8 (AUS)	F	

Replying to interview questions via writing is also a common approach of prison research pertaining to the tough administrative hurdles of prison access (Bosworth et al. 2005). For the data collection process of this research, although no prison access was needed, written response has been adopted by some respondents who replied with their willingness to contribute but were unavailable to meet face-to-face. Additionally, for some interviewees, like a released offender, who perceived face-to-face meetings too confronting or embarrassing, written response could be a less stressful and time-saving way to engage these parties, especially when sensitive topics were involved. Also, some respondents had a lot of opinions to express but not enough time to finish the whole interview, thus in some occasions follow-up questions were needed after the interview. For all these circumstances, I requested them to answer the interview questions or follow up the rest of the process by email so that they could have a chance to express themselves or to complete the whole interview without direct confrontation. The questions sent out via emails were the same as those being asked face-to-face, varying with the group of interviewees. One of the key merits of written response is that interviewees could have more time to think carefully what their experiences and feelings were. However, it is important to note that relying on written replies as a methodological approach is not without its shortcomings, such as a possible lack of opportunity to ask clarification questions, minimised interaction between the interviewer and interviewees, difficulties in rapport building, misunderstanding and no observation of interviewees' behaviour or emotions. Irrespective of these limitations, writing down the responses can somehow reduce power inequality among researchers and interviewees, as the experiences of being interrogated by authorities are less likely to be recalled (Bosworth et al. 2005). The appearance of an authoritative figure can be perceived as being involved in an interrogation or investigation process that could be uncomfortable for previous prisoners and staff as well. Returning the written questions minimised these negative emotions and allowed interviewees to have a flexible timeframe to complete the interviews and think minutely before submitting, increasing data accuracy.

4.1.3.2 Sampling Method

Snowballing, which refers to 'the process of constructing a sample of research participants from the recommendations and suggestions of other research participants'

(Davies, Francis & Jupp 2011, p. 354), has been adopted as a recruitment strategy in this research. The data collection process starts with an individual who is a suitable participant for the research. This participant is then asked to recommend or invite other potential participants who may be willing to take part. This snowballing process is repeated until data saturation is reached or a sufficient amount of information is collected (Oliver 2006). This is an effective method to reach the difficult-to-access groups or the considerably hidden groups for research when a distinct sampling frame is absent (Tracy 2013). If potential respondents are introduced to the research by a person that they trust or they are familiar with, some concerns and worries could then be mitigated, thus expanding the sample size and augmenting the number of participants in the study (Hennink, Hutter & Bailey 2011).

Since only a small portion of people have had experience being detained or working in prisons that implement sustainable programs are eligible for the research, the target population is relatively tiny and hard to access. Also, there is no official list or record of potential samples to identify the sample populations. In order to maximise the breadth of data collection, snowballing is hence the best sampling approach to purposefully reach these difficult-to-access populations who are well-informed of the program operations and other relevant matters in the field. Through existing networking, the research started with a few scholars in this area and also some ex-prison officers who were experienced in running sustainable programs. The recruitment criteria for ex-prison officers and program facilitators/scholars entail having experience in planning or running sustainable practices in prison, or having conducted research about sustainability in prison. Only released offenders who had participated in sustainable programs for at least one month were recruited for the study. Some of the interviewees eagerly assisted in inviting their colleagues and other related parties to join in. They helped to circulate my introductory letter and introduce one another. More volunteers then contacted me via email to arrange an interview. Most interviews were carried out in public areas like universities, cafes or offices and were tape recorded with consent from the interviewees, except those who returned written responses, and were conducted over the phone or video calls. The recordings were transcribed manually by myself. The interviewing process was stopped when the data began to repeat itself among each group of participants or when no more potential respondent could be sought.

There were 17 interviewees from three groups of target populations, as shown in Table 4.2. They were recruited through snowball sampling due to the difficulty in accessing these populations, and after at which point data saturation was reached for the officers and facilitators groups. Reaching data saturation with a small number of participants could largely be attributed to the similar backgrounds the interviewees have. As snowballing was adopted to recruit participants in this research, the interviewees came from a very close if not the same network. They shared similar duties, points of views and experiences, leading to data saturation being reached relatively quickly after interviewing 13 professionals in the field. Since most of the interviewees were suggested by their acquaintances or colleagues, identifying an individual can be considerably easy if the background of each interviewee is revealed in detail, especially as the network of sustainable prison programs is very narrow. Therefore, only genders and current occupations of interviewees are briefly disclosed to ensure absolute anonymity.

Among the 17 participants, four were females and thirteen were males of which four were previous incarcerated participants, five were ex-prison officers, and the remaining eight were a mix of penological scholars, program facilitators and observers. Some of the interviewees have dual roles, especially the ex-prison officers and expert interviewees who may have very different roles in terms of involvement and hence overlapping roles. For instance, some of them only organised the programs without facilitating them in person while some managed the programs and also facilitated the programs by themselves. Among all, only two participants were US-based while the other 15 were based in Australia. The four previously incarcerated participants were not asked to reveal the offences they had committed to secure confidentiality. Their time spent in sustainable programs was recorded to ensure that their engagement in programs were long and in-depth enough to exert impacts on them. They all had spent at least three months in their programs. All five interviewed ex-prison officers used to work in the same prison in Australia that implemented sustainable programs. Their duties consisted of program planning, delivering and evaluating for at least two years. Eight of the interviewees were then scholars and program facilitators working for different organisations, including universities, privately-founded and governmentally-supported NGOs. Most of them monitored, delivered and/or organised programs in prisons while some of them

conducted research in prisons. They possessed experiences and/or knowledge in the penal realm from one year to over thirty years. The three groups had established an extensive array of data collection.

4.1.3.3 Mapping the Categorised Benefits with the Five Key Factors Influencing Desistance

With all the collected data from interviewees, the final bit of analysis, which mapped the categorised benefits across desistance theories, provides a new picture of the strengths and weaknesses of implementing TH programs and animal programs in prison. The evidence given by the interviewees was used for cross-examining whether the commonly reported benefits brought by TH programs and animal programs are also conducive to enhancing incarcerated participants' likelihood to desist. Each categorised benefit was linked with the five factors influencing desistance to seek a relationship between both concepts. There could be positive, negative or even no relationships among each mapping. Corresponding explanations were detailed based on interviewees' narratives and experiences, or sometimes supplemented by other international examples. This analysis helps to validate information pertaining to the impact of sustainable programs on desistance and suggests improvements on running the programs, offering a reference guide for future program developments and operations.

4.2 Ethical Considerations

As this research involves human participants, there are various ethical requirements that must be obtained. Ethical approval was sought through the Monash University Human Research Ethics Committee (MUHREC) and approved in January 2017. There were rights of participants that need to be raised before interviewing and potential psychological risks towards the participants that have to be paid attention to.

4.2.1 Anonymity and Confidentiality

The confidentiality of each respondent and their transcripts were well protected throughout the research process. All data was anonymised before coding. Identifiers from transcripts were removed so that interviewees' identity and anonymity could be preserved (Hennink, Hutter & Bailey 2011). Personal information such as names, organisations, and seniority of ex-prison staff were hidden so that their previous or current roles would not be pointed out easily. Participants were guaranteed that

information gathered would be read by the researcher only. Although absolute confidentiality may not be guaranteed, as the findings will be reported or quoted in the final thesis and be published, I will restrict accessibility to raw materials such as recordings and transcripts. Only my main supervisor of this project might retrieve the data if necessary. Participants were also reminded that the data collected would be analysed and reported in de-identified form. For the recommended participants introduced by their friends or colleagues, their participation would never be revealed. They were assured that I would not inform their inviters whether they had taken part in the research.

To maximise confidentiality, each respondent was assigned a random number after the interview, instead of being numbered according to their priority of participation, thus avoiding their data being identified easily from the report. If some of their words are directly quoted in the report, their names will never be shown, instead, the assigned number would be applied. Besides, any identifiable information about the specific tasks an officer used to have in prison, the time of running the programs or the characteristics of program participants is excluded in the analysis or report. The quotes are only cited with the number and role of the interviewee in the program, ensuring their words will not reveal their identity.

4.2.2 Potential Risks and Informed Consent

While the aim of this study is to explore potential benefits of sustainable prison approaches to foster rehabilitation and desistance, its data collection process may still ignite interviewees' emotional fluctuation or arouse some of their undesirable past experiences, even with limited probability. For example, when interviewees were asked to mention their previous living experiences in prison, they might feel uncomfortable, sorrowful or angry to recall those memories. Furthermore, a sense of shame or unfairness might occur while telling their stories. Psychological suffering is the most probable issue that may be found during the interview and needs high attention.

Therefore, an explanatory statement stating all the potential risks and relevant information had been attached to the invitation email for interviewees' reference before the interview. The statement was also explained in further details in person upon request.

All people had the right to refuse to take part in the research after reading the explanatory statement. In addition, they were informed that they were not obliged to finish the whole interview even if they had agreed to take part. Their participation was completely voluntary without coercion or repercussion even if they suspended the interview in the middle. They could withdraw at any stage without any reason. They did not have to answer all the questions if they did not feel comfortable to. Nevertheless, participants were reminded that they were unable to withdraw from the study after data was processed or analysed because all identifiable information would have been removed. Information of suggested counselling services were provided in the statement should any of them have emotional needs afterwards. They were asked to sign a consent form or give written consent via emails before the interview officially began. All recordings and publications of data were permitted by the interviewees.

4.3 Research Difficulties and Limitations

The biggest limitation of this study is the limited number of interviewees, particularly previously incarcerated participants. Since the target population is highly specific and difficult to reach, it mainly relies on networking and snowballing to seek participants. I have endeavoured to contact NGOs and professionals in the field, both within and outside Australia, to look for their assistance in recruiting more potential respondents to narrate their experiences. However, not many of them agreed to take part. One of the major reasons for rejection was that their organisations did not have contact with any released offenders who had experience with any sustainable programs. I used to have close contact with an Australian NGO that chiefly assists the released with seeking jobs and reintegration. The then CEO agreed to grant me access to their clients who had done sustainable programs during incarceration in 2016. Yet, in 2017, they informed me that the organisation was unable to offer any help to my research because of the reduction in government funding and other political changes had put the organisation in chaos. As the developments of sustainable programs have not been systematic or prevalent in Australia and the interviewees did not have much contact with their previous colleagues or partners, the data collection process hit a snag. I then had to turn to some US-based organisations, which were excelling in running sustainable prison programs and maintained close relationships with their previous program participants or program facilitators. This helped to widen the sample size and data collection of my research, yet

the thesis still lacks sufficient released participants to share their points of view as a previous prisoner.

Moreover, the snowballing method adopted in this research has led to trustworthiness issue. Since the interviewees mostly came from a close network, many of them even worked together, had partnerships or knew me beforehand, it was not difficult for me to anticipate some of their standpoints in advance or vice versa. Data collection is thus greatly limited to a particular perspective that is shared among interviewees who are from the same network, though their individual experiences still provided rich and diverse information for analysis. I have adopted several measures to minimise impact of these issues and personal bias. For instance, I had only included neutral questions that did not show a side of thought; when I had replayed or transcribed the recordings and found myself had unintentionally asked questions in a leading way or provide leading information that guided interviewees to respond in a certain direction, I excluded the data in analysis in order to safeguard credibility of data from personal bias. It is however very difficult to standardise sequences or sets of questions even a list of interview questions was prepared before the interview had took place. Interviewees possessed different experiences and ideas that would lead to different priorities of questions or different follow up questions. Hence, some questions might have been skipped due to the lack of interview time, changed sequences of questions or addition of new questions. These may negatively affect the trustworthiness of data because of insufficient consistency.

Another limitation of this study is that data of two aspects of sustainability, which are economic and environmental, is relatively scanty. These two were deemed not to be the main concerns of many interviewees. They rather concentrated more on personal and social changes and needs caused by sustainable programs, which are the central concepts of desistance theories. Economic sustainability and environmental sustainability were then less discussed by most interviewees and the thesis, despite that they still have their roles in promoting desistance (see Chapter 8).

To clearly analyse the impact of these programs on desistance, the following chapter, which indicates the results of Phases 1 and 2 analyses, will first summarise and categorise all the reported benefits brought by TH programs and animal programs in prison

according to the four aspects of sustainability. The categorised dataset developed from the 65 research studies will be mapped to the five desistance factors to examine their respective effects on fostering offender desistance in Chapters 6-8.

*Chapter 5. Identified Benefits and Impact of TH Programs and
Animal Programs for Offenders*

A desk review of the literature on sustainable initiatives in prisons revealed that TH programs and animal programs appear to yield the best outcomes for offender transformation and that their use is growing significantly, rendering them of particular value for further research. I thoroughly reviewed 65 studies and reports on TH programs and animal programs operating in prisons from the 1990s to 2010s, and the literature reviewed is summarised in Table 5.1. This chapter will present four categorised lists of the benefits of TH programs and animal programs as identified from the literature review related to the implementation of these programs in penal settings worldwide (see Tables 5.2–5.5). I will introduce a new categorisation of these benefits in order to theorise the significance of the four aspects of sustainability (i.e. environmental, economic, social and personal) that support desistance. The benefits will be classified into these four main themes to enable further analysis of their respective impacts on desistance in Chapters 6–8.

Table 5.1 The 65 Research Studies of TH Programs and Animal Programs in Prisons around the World

Authors	Year of Publication	Title of Article/Report/Book	Program(s) Discussed (TH/ Animal Program)
Insight Garden Program	2019	Research studies	TH
Beseres, M	2017	Unintended rehabilitation: a comparative analysis of prison animal programs	Animal

Granger, KV	2017	Grow where you are planted: the use of gardening as offender rehabilitation in prison	TH
Holmes, ME	2017	The effect of horticultural community service programs on recidivism numbers of offenders	TH
Passarelli, E	2017	Becoming environmentalists: previously incarcerated individuals' experiences with science and sustainability programs in prison	TH & Animal
Allison, M & Ramaswamy, M	2016	Adapting animal-assisted therapy trials to prison-based animal programs	Animal
Diehl, E & Brown, SP	2016	Horticultural therapy	TH
Jenkins, RD	2016	Landscaping in lockup: the effects of gardening programs on prison inmates	TH
Rutt, D	2016	Prison horticulture	TH
Trivett, J, Bush, K, Elliott, C, Mann, J, Pond, R, Tharp, E, Vanneste, J, Pacholke, D & Leroy, C	2016	A case study: Sustainability in Prisons Project (SPP) horticulture programs	TH & Animal

Brown, A, Frissora, GG, Wardle, RE & Onwudiwe, CC	2015	Rehabilitation in prison: an examination of prison animal programs	Animal
Brown, G, Bos, E, Brady, G, Kneafsey, M & Glynn, M	2015	A summary report of an evaluation of the Master Gardener Programme at HMP Rye Hill: a horticultural intervention with substance misusing offenders	TH
Kadaba, LS	2015	Roots to re-entry plants a seed	TH
Kaye, TN, Bush, K, Naugle, C & LeRoy, CJ	2015	Conservation projects in prison: The case for engaging incarcerated populations in conservation and science	TH & Animal
Koda, N, Miyaji, Y, Kuniyoshi, M, Adachi, Y, Watababe, G, Miyaji, C & Yamada, K	2015	Effects of a dog-assisted program in a Japanese prison	Animal
Little, PC	2015	Sustainability science and education in the neoliberal ecoprison	TH & Animal
Sohn, KM	2015	The effects of human-animal interaction on incarcerated women participating in a prison-based animal program	Animal
Thomas, R & Matusitz, J	2015	Pet therapy in correctional institutions: a perspective from relational-cultural theory	Animal

Benham, MK	2014	From utility to significance: exploring ecological connection, ethics, and personal transformation through a gardening and environmental literacy program within San Quentin Prison.	TH
Brown, M	2014	Of prisons, gardens, and the way out	TH
Cooke, BJ	2014	An evaluation of prison-based dog-training programs in two US states using a mixed-methods approach	Animal
MacCready, SD	2014	Food, farming, and our justice system: horticulture programs in correctional settings	TH
Sempik, J, Rickhuss, C & Beeston, A	2014	The effects of social and therapeutic horticulture on aspects of social behaviour	TH
Gallagher, BE	2013	Science and sustainability programs in prisons: assessing the effects of participation on inmates	TH & Animal
LeRoy, CJ, Tribett, JR, Bush, K, Vanneste, J & Pacholke, D	2013	The Sustainability in Prisons Project handbook: protocols for the SPP network	TH & Animal
Mulcahy, C & McLaughlin, D	2013	Is the tail wagging the dog? A review of the evidence for prison animal programs	Animal
Steels, B	2013	Creating restorative and sustainable environments within custodial services: capturing a template for the future	TH & Animal

Wheaton, L	2013	Prison-based animal programs: a critical review of the literature and future recommendations	Animal
Dietz, TJ, Davis, D & Pennings, J	2012	Evaluating animal-assisted therapy in group treatment for child sexual abuse.	Animal
Gilbert, E	2012	Urban garden programs reach out to inmates and at-risk populations	TH
Johnson, K	2012	Raising frogs for freedom, prison project opens doors	Animal
Kohl, R	2012	Prison animal programs: A brief review of the literature	Animal
Norton, CL, Holguin, B & Manos, J	2012	Restoration not incarceration: An environmentally based pilot initiative for working with young offenders	TH
Weber, SR	2012	Environmental education in prison: a comparison of teaching methods and their influence on inmate attitudes and knowledge of environmental topics	TH & Animal
Cannizzo, J	2010	Growing with the garden: a curriculum for practicing horticulture with incarcerated individuals	TH
Jasperson, RA	2010	Animal-assisted therapy with female inmates with mental illness: a case example from a pilot program.	Animal
O'Callaghan, A, Robinson, M, Reed, C & Roof L	2010	Horticultural training improves job prospects and sense of well-being for prison inmates	TH

Jiler, J	2009	Restoring lives, transforming landscapes: the GreenHouse Program at Rikers Island Jail	TH
Ulrich, C & Nadkarni, NM	2009	Sustainability research and practices in enforced residential institutions: collaborations of ecologists and prisoners	TH
Walsh, F	2009	Human-animal bonds I: the relational significance of companion animals	Animal
Barry, LM	2008	A journey through the prison garden: weeds in the warehouse	TH
Ormerod, E	2008	Companion animals and offender rehabilitation – experiences from a prison therapeutic community in Scotland	Animal
Britton, DM & Button, A	2007	“This isn’t about us”: benefits of dog training programs in a women’s prison	Animal
Fournier, AK, Geller, ES & Fortney, EV	2007	Human-animal interaction in a prison setting: Impact on criminal behaviour, treatment progress, and social skills	Animal
Furst, G	2007	Without words to get in the way: Symbolic interaction in prison-based animal programs	Animal
Lindemuth, AL	2007	Designing therapeutic environments for inmates and prison staff in the United States: precedents and contemporary applications	TH
Nimer, J & Lundahl, B	2007	Animal-assisted therapy: a meta-analysis.	Animal

Turner, WG	2007	The experiences of offenders in a prison canine program	Animal
Elings, M	2006	People-plant interaction: the physiological, psychological and sociological effects of plants on people.	TH
Furst, G	2006	Prison-based animal programs: a national survey	Animal
Britton, DM & Button, A	2005	Prison pups: assessing the effects of dog training programs in correctional facilities	Animal
Harkrader, T, Burke, TW & Owen, SS	2004	Pound puppies: the rehabilitative uses of dogs in correctional facilities	Animal
Sandel, MH	2004	Therapeutic gardening in a long-term detention setting	TH
Waitkus, KE	2004	The impact of a garden program on the physical environment and social climate of a prison yard at San Quentin State Prison	TH
Grimshaw, R & King, J	2003	Horticulture in secure settings: prisons and secure psychiatric facilities	TH
Sempik, J, Aldridge, J & Becker, S	2003	Social and therapeutic horticulture: evidence and messages from research	TH
Simson, SP & Straus, MC	2003	Horticulture as therapy: principles and practice	TH

Strimple, EO	2003	A history of prison inmate-animal interaction programs	Animal
Aldridge, J & Sempik, J	2002	Social and therapeutic horticulture: evidence and messages from research	TH
McGuinn, C & Relf, PD	2001	A profile of juvenile offenders in a vocational horticultural curriculum	TH
Richards, HJ & Kafami, DM	1999	Impact of horticultural therapy on vulnerability and resistance to substance abuse among incarcerated offenders	TH
Lai, J	1998	Literature review: pet facilitated therapy in correctional institutions	Animal
Rice, JS & Remy, L	1998	Impact of horticultural therapy on psychosocial functioning among urban jail inmates	TH
Cushing, JL, Williams, JD & Kronick, RF	1995	The Wild Mustang Program	Animal
Lynn, CG	1993	The effect of horticulture therapy and animal-assisted therapy on seriously emotionally disturbed elementary students in a public school setting: an ethnographic study	TH & Animal

As the most frequently reviewed and researched sustainable prison programs, TH programs and animal programs are used to demonstrate the effects and importance of promoting sustainability in prison and their potentials on facilitating offender transformation. A wide variety of these programs are being adopted in many countries, with differing aims, operations and outcomes. Most are found to benefit offenders in

multiple ways, such as by enhancing self-esteem, increasing employability and improving communication skills and relationships with others (see, for example, Britton & Button 2005; Cooke & Farrington 2016; Furst 2011; Passarelli 2017). Sections 5.2–5.5 will summarise the data and present the classification of the benefits of TH programs and animal programs identified from the literature.

5.1 Personal Benefits

Table 5.2 lists the personal benefits (and their corresponding codes) of TH programs and animal programs as identified from the existing literature, divided according to two subthemes – ‘physical benefits’ and ‘psychological benefits’ – to refine the analysis.

Table 5.2 Personal Benefits of Partaking in TH Programs or Animal Programs in Prison

Subtheme: Physical Benefits
<ul style="list-style-type: none"> a. Developing practical / occupational skills b. Developing life skills c. Developing knowledge / literacy / numeracy d. Healthier incarcerated lifestyle e. Better physical health in general f. Reduced substance abuse g. Less self-harm h. Less engagement in illegal activities in prison i. Increased employability
Subtheme: Psychological Benefits
<ul style="list-style-type: none"> a. Reduced depression / anxiety / stress b. Calming / reduced aggression / a sense of serenity / improved self-control / patience c. Improved confidence / self-esteem / self-worth / accomplishment d. Empowerment / autonomy e. A sense of purpose f. A sense of interconnectedness between humans, nature and the environment / a feeling of being respected, supported, loved or trusted

- g. Empathy
- h. A sense of responsibility
- i. Being altruistic
- j. Respecting other people and living things

For the purposes of this research, ‘psychological benefits’ refer to any positive development or improvement in mental wellbeing, which includes but is not limited to the discussions on emotion management, self-evaluation, and attitudes towards humans or other living things. ‘Physical benefits’ refer to all kinds of non-psychological gains resulting from the programs. ‘Physical’ not only represents benefits in terms of physique or general health, but also reflects intangible gains such as vocational and educational benefits. ‘Physical benefits’ include gaining practical skills, experience and knowledge that are not related to cognition or moral reasoning but may be conducive to one’s living. This draws the most distinct line between the two subthemes.

It appears that if both psychological and non-psychological aspects are attended to, offenders can experience significant transformation, even during incarceration. Table 5.2 shows the possible personal benefits of participating in TH programs and animal programs identified by incarcerated offenders from different countries. Nearly all of the programs evaluated have reported positive results in which both the physical and mental health of an individual have been looked after. The literature reveals that there are very few disadvantages of such programs, which include certain procedural or moral issues such as offenders convicted of violent crimes are considered unsuitable to look after animals (see Jiler 2009; Kohl 2012). From a physical perspective, participating offenders are able to better themselves by attaining diverse skills, including occupational skills and life skills such as presentation skills, communication skills and problem-solving skills, as well as academic and educational knowledge and skills that may improve their post-release life and reduce their likelihood of reoffending. Decreasing involvement in deviant activities or behaviour, like drug use and self-harm, is also part of the physical benefits arising from TH and animal programs. In terms of psychological gain, an offender can re-evaluate themselves in a more favourable light (many do not treat or perceive themselves with respect or affection), and may also change the way they view other

people or living things. The journey of improving one's psychological wellbeing includes not only the individual offender; there needs to be others (people or animals) with which the offender can interact so that they can develop meaningful attachment to someone or something that allows them to clarify or re-discover their purpose in life, beside themselves, to practise kindness and respect. In general, all the psychological benefits reported in the literature required the engagement of a second party to yield the best results. Thus, the offenders may not be the only beneficiary of their psychological growth. The people and other living things involved in these programs can be conducive to the offenders' transformation into a constructive citizen in the community.

5.2 Social Benefits

Social benefits in this research refer to the positive impacts that directly benefit communities and help offenders to connect with communities to build a safe and fair society. This involves offenders networking with their peers in prison and with people in the outside community as well as the positive impact of their personal changes on the development of public safety and cohesion. Table 5.3 presents eight social benefits identified from the literature.

Table 5.3 Social Benefits of Partaking in TH Programs or Animal Programs in Prison

- | |
|---|
| <ul style="list-style-type: none"> a. Better cooperation / communication / interaction with other people b. Improved social connection / relationship / inclusion / networking c. Respecting other people and living things d. Contributing to the community / promoting the common good e. Being altruistic f. Reduced recidivism g. Normalisation (for both offenders and the communities) h. Pursuing social justice |
|---|

The literature indicates that in order to provide social benefits for offenders and the community, interaction and collaboration between the two are crucial. Individuals, especially offenders, can be extraordinarily susceptible or unsure about their social roles, and how to change them into a responsible citizen. The impacts of how they interact with society therefore contribute to forming their obligations, expectations and motivations to

change in the future. Through the interactions between offenders and other community members, the requirements for building a cohesive society can be communicated and learnt by both parties, not just offenders. Because there are many community members who are ignorant about offenders and offending, social stratification, stigmatisation and prejudice can be developed and is destructive to offenders and their desistance journey. Improving the relationship between these parties allows offenders to express the changes they have undergone to the outsiders involved in sustainable programs and enables the public to understand more about offender transformation and offender needs in relation to successful reintegration. As a consequence, social justice is more likely to be pursued inside and outside prisons, encouraging offenders to desist (see more about social justice in Section 7.4).

Prison staff also play a part in facilitating social sustainability in prison. Their role is highly influential as interaction with prison staff is one of the most frequent social interactions offenders encounter and one that helps to shape the social relationships in prisons. Sustainable programs can show staff a new way of appreciating offender behavioural and attitudinal changes in prison, thus narrowing the social distance between staff and offenders. Improved communications and relationships hence ameliorate prison staff's points of view on offenders since the individual characteristics of offenders, such as beliefs and backgrounds, can affect the quality of services provided by the staff (Woolf 1991). A more supportive and less intimidating culture can be built in prison, which may then support and motivate offenders on their journey towards desistance. Offenders' growth in humanity is also found to be essential in facilitating desistance. Learning to be respectful and altruistic is not just beneficial to psychological growth, as shown in Table 5.2. The experience of participating in sustainable programs raises offenders' awareness of societal needs, and encourages offenders to contribute to their broader community, especially to help vulnerable groups. The process allows offenders to comprehend the mutual benefits and obligations of such interactions with the community as a responsible and law-abiding citizen, and in turn to protect the common interests and values of their society.

5.3 Environmental Benefits

Environmental benefits refer to positive impact on the prison social environment or natural environment in this thesis. Table 5.4 outlines the benefits of TH programs and animal programs in terms of both the natural and the social environment, three of which (*environmental benefits a, b and d*) are related to the natural environment and one of which (*environmental benefit c*) concerns the social environment in prison. Greening up the prison and conserving plants and animals are two typical environmental benefits of any TH or animal programs, whether they are run inside or outside prison. All of the literature reviewed attests to the contribution to nature and its habitants made by offenders who participate in such programs. Additionally, the contributions embrace not only the physical aspects but also the cognitive aspects as the programs help offenders to understand more about the needs of and potential harms done by humans to the environment. More importantly, the social environment in prison and the relationships that take place within this setting can also be considered as a kind of environmental benefit. TH programs and animal programs are conducive to alleviating the stress caused by prison life by facilitating a safer, more relaxing and humanising atmosphere for offenders and staff alike, thereby also relieving tension and hostility between both parties.

Table 5.4 Environmental Benefits of Participating in TH Programs or Animal Programs in Prison

<ul style="list-style-type: none"> a. Greening up the prison b. Conserving special / endangered plants / animals in prison c. Building a safer/ more relaxing / calming / humanising prison environment for offenders and staff / increasing morale between offenders and staff d. Improved understanding of / reducing harm to the environment

5.4 Economic Benefits

Economic benefits are seen as positive impact supporting individual and social economic growth in this research. Table 5.5 portrays the economic contributions of sustainable programs at both the micro and macro levels. From the micro perspective, offenders can learn about managing their own finances through sustainable programs that incorporate financial education. They are able to learn how to save money and plan for their everyday life in prison and their future. Many offenders also endeavour to take financial responsibility of their family by sending them money (despite that the amount may be small) even though they do not live together.

At the macro level, TH programs and animal programs can save taxpayers' money by reducing the public costs of environmental conservation, such as rearing endangered species, and the costs of social services, like training guide dogs. As offenders tend to receive only little, if any, wage for their prison duties, this can save money for prisons, communities and governments, who would otherwise need to hire professionals to perform these jobs.

Table 5.5 Economic Benefits of Participating in TH Programs or Animal Programs in Prison

<ul style="list-style-type: none"> a. Support offenders' own daily necessities in prison b. Saving up / planning for post-release life/family c. Saving operational expenses for prisons and governments / Contributing to the national economy d. Reducing the costs of environmental conservation

To undertake a more thorough investigation of the impact of TH programs and animal programs on desistance, each category of benefit will be individually examined according to the five criteria of desistance discussed in Chapters 6 to 8, in order to explore the relationship of each with desistance. Figure 5.1 presents the framework of analysis adopted in this thesis.

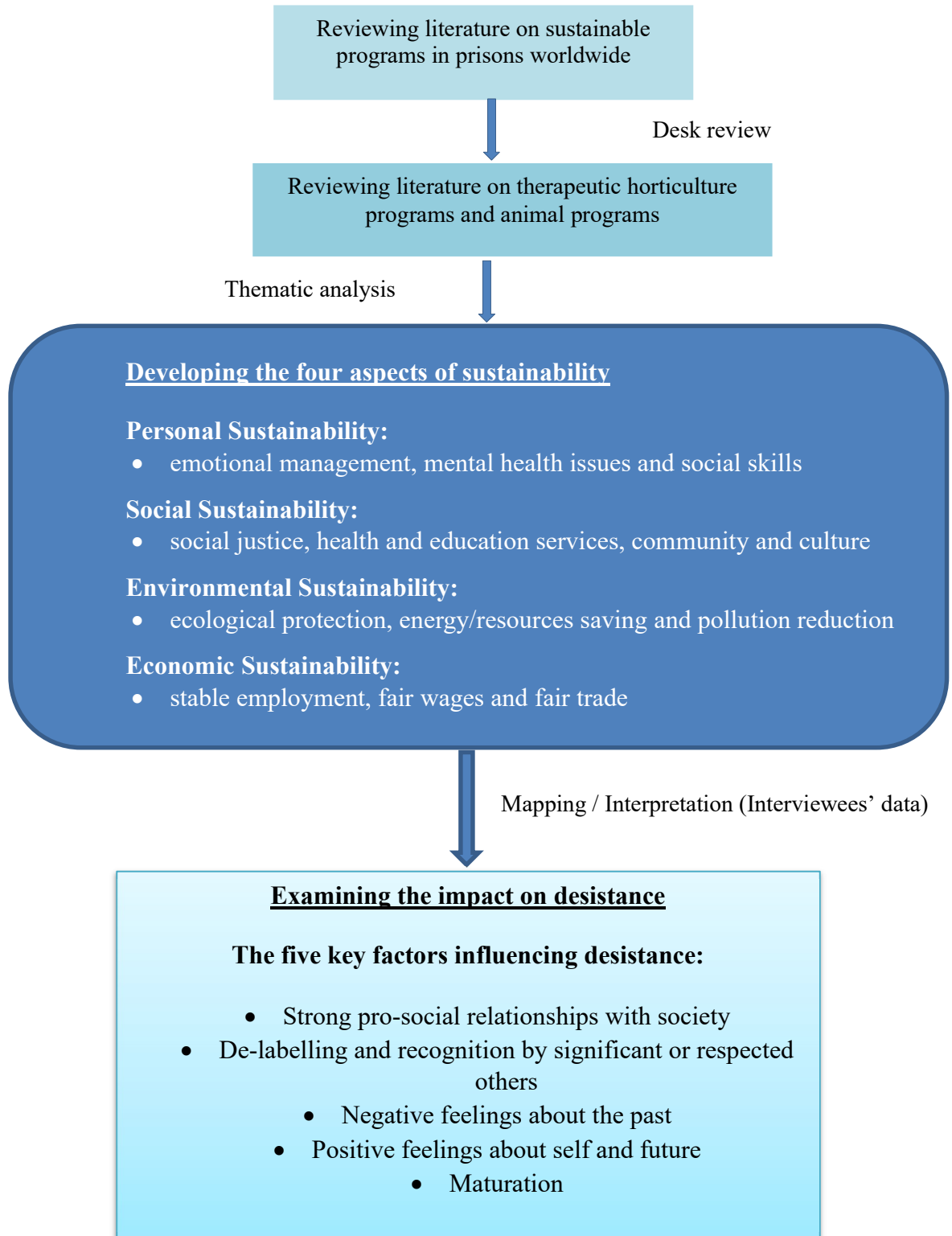


Figure 5.1 Framework of the study

While the findings of the desk review and thematic analysis have been summarised in this chapter, Chapters 6 to 8 will present the results of mapping the categorised benefits across the five key factors of desistance and their corresponding relationships with desistance.

5.5 Auxiliary Benefits

The auxiliary benefits are the benefits that do not directly contribute to desistance facilitation which means that they are unable to result in significant or meaningful changes that can remarkably help the offenders who have participated in the sustainable programs to desist. Some of them do have benefits on transforming offenders minimally but due to other concerns or risks which may outweigh these benefits, they are only considered as auxiliary. These auxiliary benefits are identified during the analysis so they will be presented at the end of each chapter after all the benefits of each aspect of sustainability have been discussed, helping to reflect an impartial point of view on the possible benefits of sustainable programs by acknowledging that not all of them are absolutely helpful in enhancing desistance.

Chapter 6 Personal Sustainability

To date, rehabilitation programs are a common if not essential transformative mechanism used in most prisons, the world over. The ethos underpinning the provision of vocational training and education programs to prisoners is generally articulated as the need to give offenders an opportunity to gain economic independence, and to develop the necessary skills and knowledge during incarceration to increase their employability once outside the prison system, thereby reducing their likelihood of reoffending. However, long-term desistance is a more complex challenge and vocational training or education is unlikely to be sufficient to ensure that this will occur. Many correctional institutions promote and apply vocational training and education as the key components of successful rehabilitation. Although these can be important components of a successful post-release experience, considering them as the only goals of rehabilitation may hinder permanent desistance as released offenders may have no opportunities or nowhere to demonstrate their competencies or exercise their new skills in the real world (Weaver & McNeill 2013) due to various challenges and obstructions. Practical skills and general literacy learned in prison are not sufficient to enable prisoners to cope with all the problems and life challenges they face after release. Beyond those basic knowledge acquisitions, if they have no way to enact their abilities or change their lives to build self-respect and establish affiliations away from offending populations, desistance might be too difficult to maintain (Braithwaite 1989).

Thus, more is needed in prison to promote desistance post-release. The psychological and behavioural changes gained through participation in sustainable programs, which are often highlighted in the research literature and were also raised by the interviewees in this study as the key signs of offender transformation and desistance, have become a key area for research in this regard. Programs such as the Sustainability in Prisons Project (SPP) in the US that integrate vocational/educational elements into activities like rearing animals hence play an important role in overcoming the drawbacks of the approach solely focused on vocation/education because the learning process not only includes basic

knowledge or practical skills but also equips offenders with the attitude needed to face the challenges of life post release and to desist from offending.

The previous chapter analysed the existing literature on TH programs and animal programs around the world and presented a list of personal, social, environmental and economic benefits of such programs that are vital to offenders' all-round development (see Tables 5.2–5.5). This chapter focuses on exploring *personal sustainability*, classifying the personal benefits resulting from TH programs and animal programs into two subthemes for analysis: the psychological and the physical benefits arising from an individual's mental, behavioural, vocational and educational advancement. Personal sustainability highlights one of the most important aspects suggested by desistance theories: the personal changes that are needed for an individual to enhance their wellbeing and become a functioning member of society. The chapter aims to discover why and how the personal benefits produced by the two types of sustainable programs can affect offenders' behaviour and cognitive processes. Table 6.1 summarises the impacts of each personal benefit in terms of promoting desistance among prisoners, as explored in this chapter. The physical and psychological benefits listed in Table 6.1 will be examined in relation to the five key factors of successful desistance that were derived from the detailed review of the desistance literature, outlined in Chapter 2, to test how personal sustainability is related to desistance. An explanation of the impact of each personal benefit on desistance will be outlined in separate sections, first considering physical benefits and then psychological benefits, with the aim of demonstrating the nature of each corresponding relationship, and hence determining how each benefit can support desistance, including its potential contributions and drawbacks.

Table 6.1 Linking Personal Benefits to the Five Key Factors influencing Desistance

Key Factors influencing Desistance	Physical Benefits	Psychological Benefits
Positive Feelings about Self and Future	a. Developing practical / occupational skills b. Developing life skills c. Developing knowledge / literacy / numeracy i. Increased employability	c. Improved confidence / self-esteem / self-worth / accomplishment d. Empowerment / autonomy e. A sense of purpose f. A sense of interconnectedness between humans, nature and the environment / a feeling of being respected, supported, loved or trusted
Negative Feelings about the Past	-	g. Empathy h. A sense of responsibility i. Being altruistic
De-labelling and Recognition by Significant or Respected Others	a. Developing practical / occupational skills b. Developing life skills c. Developing knowledge / literacy / numeracy f. Reduced substance abuse h. Less engagement in illegal activities in prison	h. A sense of responsibility

Strong Pro-Social Relationships with Society	-	-
Maturation	-	g. Empathy h. A sense of responsibility i. Being altruistic j. Respecting other people and living things
Auxiliary Personal Benefits influencing Desistance (Do Not Directly Contribute to Desistance)	d. Healthier incarcerated lifestyle e. Better physical health in general g. Less self-harm	a. Reduced depression / anxiety / stress b. Calming / reduced aggression / a sense of serenity / improved self-control / patience

6.1 Positive Feelings about Self and Future

LeBel et al. (2008, p. 138) state that 'one's mindset (willpower, motivation) is what matters'. It is therefore essential to keep an offender motivated and instilled with hope in order to encourage them to move on and overcome negative factors that may lead to reoffending after release (Maruna 2001). Offenders need to develop a new self or pro-social identity to maintain their morale and desist from reoffending (Giordano, Cernkovich & Rudolph 2002). This would appear to relate most to psychological

developments, but physical benefits also contribute to an individual's mental wellbeing and hence their desistance.

Physical Benefits

This section explores the following four of the nine physical benefits identified in Table 5.2:

- *Physical Benefit a. Developing practical /occupational skills*
- *Physical Benefit b. Developing life skills*
- *Physical Benefit c. Developing knowledge / literacy / numeracy*
- *Physical Benefit i. Increased employability.*

These benefits reflect the relationship between enhancing desistance and establishing certain essential elements of conventional rehabilitation programs, like boosting offenders' knowledge, practical and living skills, and employability.

Reoffending has a positive relationship with unemployment (Cammack, Waliczek & Zajicek 2001; MacCready 2014). It is challenging for released prisoners to compete with others who have more experience and qualifications and no criminal record (MacCready 2014), and this problem can be overwhelming for many released offenders. A combination of education and vocational training could enhance not only offenders' skills and knowledge in a specific area but also their employability after release. Contributing to physical benefits *a*, *b*, *c* and *i* can improve an offender's self-perception and give them hope and motivation in their post-release life. This is conducive to helping offenders to remain out of the criminal cycle by increasing their capacity to desist and to build a better life.

An ex-participant of a US animal program interviewed for this study recalled his forward-looking attitude while undertaking the program, which included not only animal rearing but also peer mentoring:

'I love learning. I never recognised I like learning that much ... I was bad in school ... Now I want to get my GED (General Educational Development tests in the US) [which he had not previously done or planned to do] ... I was in a program teaching the guys [with a similar background to him], helping these guys [in various ways], for example, how to tidy their ties, how to do their GED ... I love

teaching people, I think I will be a good instructor ... The [animal rearing] program makes me more comfortable and confident ... I go to school and I am so happy with what I am doing. It gives me the first shot.' (Previous Incarcerated Participant, P2)

The growth of personal sustainability requires that an individual improve their human capital (that is, skills and knowledge) to support themselves and their family or dependents (Farrall 2004; Muasya 2013). Low education can be a risk factor to offending as it may affect the employability of an individual, and in turn their ability to earn an adequate income for themselves and their families (Richards & Ross 2007; Richards et al. 2012). Since a significant proportion of prisoners have never received formal education or have discontinued schooling early in life (Richards & Ross 2007; Richards et al. 2012), receiving proper vocational training and education through a sustainable program can be an integrated way for offenders to improve their human capital, establishing their positive feelings about self and future by undertaking the assigned work and study tasks.

Interviewee O3, who organised TH programs in prison, also argued that education and work in sustainable programs are powerful tools for helping offenders to move on, including Indigenous offenders who are over-represented in Australian prisons:

'As we know that a lot of the Aboriginal people fall out of the education system, so just sticking them in the classroom is not going to work, although in the first two weeks of the [TH] program they were in the classroom and that worked because the guy who was teaching it would not engage them in traditional all-sitting desks. It was a classroom that had more interaction among the group. We targeted to Aboriginal prisoners for that reason and then the course was expanded.' (Ex-Prison Officer, O3)

The same interviewee mentioned that getting Indigenous offenders involved can be a challenge because many existing prison programs are not sufficiently culturally sensitive to address the concerns or issues that discourage Indigenous offenders from participation. However, sustainable programs, especially TH programs, are more inclusive of diverse participants as they employ a non-traditional and culturally sensitive approach to

teaching, learning and job training. Therefore, within a prison setting, such programs have significant potential for reducing reoffending among this over-represented group.

There are also sustainable programs offering more advanced education or certificates in horticulture or animal training that encourage participants to gain recognised qualifications for their experiences and training in prison, which in turn increases their employability post-release. For instance, the GreenHouse/GreenTeam Programs at Rikers Island jail brings science into the prison garden. It teaches offenders knowledge related to the structures and growth of plants (Cannizzo 2010). This program thus provides more than basic knowledge or skills such as numeracy and literacy, as participants gain more advanced and practical knowledge in sciences including biological and chemical concepts. This provision of more advanced and specific knowledge enables participants to excel to a greater extent before their release and therefore to become more competitive in the job market comparing with other participants of prison practices which simply teach basic literacy and numeracy. In Oregon, the Lettuce Grow Program requires participants to develop their knowledge and ability in gardening to an advanced level, from which they can be awarded a certificate. This qualifies their effort and knowledge and gives the released prisoner an advantage among competitors in the job market (MacCready 2014). A similar program in Chicago, the Windy City Harvest Corps program, allows participants to earn certificates in horticulture and urban agriculture, in which the techniques and knowledge taught are not limited to horticulture but also cover business and marketing. The participants may also apply for a paid internship position after completion of their six-month training (MacCready 2014). These programs that include certification could help address the unemployment problems facing released participants and develop more 'successful pathways related to [their] goals' (Snyder et al. 1991, p.570), and thereby help to reduce reoffending and to foster desistance.

The education and vocational training sections of sustainable programs could be a powerful motivator and crucial turning point for the released to obtain a job soon after their discharge from prison. Offenders are more competent and motivated to seek work after their release since they have improved their sense of self-worth and confidence through their participation in these programs. In this way, their human capital can be

cultivated and they will be more likely to have positive feelings about self and future. Yet, internship and recognition or certification of offenders' prison work and learning were not provided in any of the interviewees' prisons in this research. Based on their experiences, while educational opportunities were available to them, these offenders needed to proactively and independently seek to attain specific certification as certification was not granted automatically upon completion of the prison programs.

Psychological Benefits

Psychological benefits cover the different yet complementary components to the physical benefits. Among the 10 psychological benefits listed in Table 5.2, four (*c*, *d*, *e* and *f*) appear to significantly improve offenders' self-perception. This section first explains the core concept adopted in this chapter to explain the psychological functioning of offenders and their behaviour, and then details how each of the four benefits can impact desistance.

Being employed is a significant factor that acts as a barrier to reoffending, but it should not be the only goal of rehabilitation. Comprehensive development of one's whole being should instead be the primary goal. When an offender makes a firm decision to desist, factors such as unemployment become less influential (LeBel et al. 2008) as sustainable programs are able to increase an offender's self-belief, confidence and self-recognition. Furst (2006) claims that positive changes in attitudes (cognitive changes) are usually associated with modifications in behaviour. This implies that once negative thoughts are reduced, an individual's behaviour can change as a result. In this view, reoffending would thus be less appealing if an offender's attitude towards life and crime were changed, given that major changes in ways of thinking are needed.

'Irrational or distorted thoughts and beliefs' and negative emotions are interrelated to each other (Beck 1976; Burkhead 2007) and may contribute to offending. For instance, a person may have depression caused by a childhood experience that could lead to the development of distorted or pathological attitudes and assumptions in adolescence or adulthood. These abnormal thoughts may cause further loneliness and isolation among peer groups or other community members, thus exacerbating depression (Beck 1976; Burkhead 2007). Nevertheless, irrational or distorted thoughts and beliefs refers to more than conventional mental illness in this thesis. These may include impaired moral and

logical reasoning, such as being selfish and narcissistic, that may not be severe enough to be diagnosed as a personality disorder. People with these characteristics might turn to crime if they fail to adopt a pro-social way to fulfil their own needs while facing obstacles in life. Such an offender would violate social standards, ethics and laws and sacrifice other community members' rights and benefits to achieve their goals. These irrational or distorted mindsets need to be addressed through sustainable programs, while teaching offenders how to desist. Individuals with these cognitive issues need to replace their distorted beliefs with sound beliefs in order to avoid the negative emotions caused by such irrational thoughts and instead to foster a positive transformation in their thinking and moods, and in turn their behaviour (Burkhead 2007). Beck (1976) claims that emotions and moods are regulated by three thoughts: self, current experience and the future. These thoughts, which affect how an individual perceives themselves and their surroundings, are alterable. Positive Feelings about Self and Future is the first factor shaping desistance to be advanced through cognitive transformation.

- *Psychological Benefit f. A sense of interconnectedness between humans, nature and the environment / a feeling of being respected, supported, loved or trusted*

Through participation in sustainable programs, offenders will be highly likely to acquire love, trust and support by working with animals and plants. Experiencing these positive feelings can be extraordinarily influential on an offender's life, especially during incarceration, as they might never have experienced such feelings before or may have lost them after conviction. If connecting with non-human living things can engender positive feelings such as support and love, it is highly likely that an individual's self-evaluation will also improve, which can lead to positive emotional and behavioural changes.

Most of the program facilitators, related experts and ex-prison officers interviewed (P2-P4, O1- O5, E1-E4, E6, E8) agreed that interacting with plants and animals, especially the latter, exposes offenders to new emotions and attachments. One of the former prison officers had witnessed such change in an offender who participated in an animal program focused on dogs. He said that:

'I was quite shocked by that [what he had found from that offender] ... a lifer who was really violent and I was watching him rolling around on the floor with the

dogs and be able to make that connection [with the dog] ... It was about being able to openly show affection towards a dog, an animal. It was quite significant... sometimes you don't appreciate the benefits of something you did, until you get that feedback ... Then they would know, "Oh yeah I have you [the animal] and you have me".' (Ex-Prison Officer, O2)

The genuine companionship, affection and loyalty offered by animals can foster significant and obvious changes in the caregivers' behaviour and personalities that are witnessed by third parties, like the prison officer quoted above. It is common for the participants of animal programs to not fully comprehend the changes and contributions they gain through these programs, as the positive feedback they receive might come in the form of the unconditional responses of animals, such as love and trust. Perceived love, support and trust help cultivate a 'new self' for the offender and this can help reduce the negative emotions that prisoners often experience, such as distress and loneliness. This allows the program participants to re-evaluate their current experiences, self-perceptions and future, which are all significant to the composition of one's emotions and behaviour (Beck 1976). If the individual is optimistic about themselves and their current situation, they will more likely be hopeful about their future and thus have positive emotions that enable them to conquer irrational thinking. As the prerequisite of desistance, behavioural changes that require 'the maintenance of crime-free behaviour' (Piquero 2004, p. 104) will subsequently be facilitated, thereby enabling the achievement of 'long-term abstinence from crime among individuals who had previously engaged in persistent patterns of criminal offending' (Maruna 2001, p. 26). Hence, sustainable programs can help offenders to slowly boost their feelings of self-worth through interacting with the animals or plants that they work with and meanwhile understand unconditional love as well as feeling human again (Deaton 2005). An improved self-image allows the incarcerated participants to have a new perspective on prison life: instead of treating it as merely detrimental to their life, the prison program allows them to develop a new identity that is conducive to pro-social thoughts and crime-adverse behaviour (Burkhead 2007).

Furthermore, affection received from non-human living things can simulate the kind of love and care that has been missing from their past lives or during incarceration. Many

participants in the Prison Pet Partnership Program in the Washington State Corrections Center for Women revealed that the dogs that they looked after could replace or compensate for the lack of family and friends during their time of isolation from healthy human relationships (Sohn 2015). While human relationships might change because of one's appearance, age, wealth or achievement, relationships with animals or nature do not because animals and plants are non-judgemental and indifferent to their caregiver's past or current status. Interacting with non-human living things is particularly important for offenders who do not have regular contact with family or friends. The strong bond built between program participants and the subjects they look after can entirely change the offender's incarcerated life and substitute for the loss of connection with or support from family to a certain extent. Working in an environment that lacks labelling, blame, judgement, prejudice and stigmatisation helps offenders to feel positively connected with other living things on earth. When other relationships with humans have failed, animals or plants will not abandon or betray their caretakers. In most circumstances, animals and plants positively respond to and grow with their caregivers, physically and psychologically (in the case of animals). Some participating offenders may never have been so loved and supported by anyone in their life, while some may have been living without social acceptance or appreciation. Interactions with non-human beings can then be the start of ameliorating their negative self-image (Serpell 2011) and having faith in the future. The resulting improved self-evaluation could bring offenders out of isolation from positive human relationships and in turn motivate them to remain on the path of desistance (Deaton 2005).

- *Psychological Benefit c. Improved confidence / self-esteem / self-worth / accomplishment*
- *Psychological Benefit e. A sense of purpose*

Life in prison can feel purposeless for many offenders. Being assigned a job does not necessarily provide one with a sense of purpose or self-confidence, but sustainable programs seem to carry more promise in this regard. Interviewee E4 drew on his 30 years of experience in rehabilitation when he affirmed the need for purpose and the importance of sustainable programs to offenders:

‘[b]oredom kills people but hopelessness is more destructive. There needs to be meaningful activities for prisoners to move on, stay out of trouble, even for lifers

... The [TH] program, the duties, are showing us how they find meanings out of their everyday work.' (Expert Interviewee, E4)

This interviewee believed that sustainable programs offer more humanised and engaging tasks to offenders than traditional rehabilitation programs, which helps them to establish a sense of purpose in their lives. Working in a field that does not encourage one to think about and pay attention to other living things is less likely to cultivate such a sense of purpose. For instance, taking a cleaning or laundry job that only embraces routine tasks is less likely to sustain the employee's motivation to advance in work and life and to keep away from trouble, and less likely to involve tasks they look forward to.

In contrast, sustainable programs can motivate animal and plant caretakers and give them a reason to move on. A manager of the prison farm in Kentucky, the US, asserted that incarcerated participants found a purpose to live while participating in sustainable programs because 'never in their life had anyone or anything been dependent upon them and now they do' (quoted in Strimple 2003, p. 76). Feeding the animals, walking them, cleaning them up, watering the plants and fertilising become the participants' everyday duties. Such a focus on being responsible for another living thing enriches the otherwise dull prison life and gives offenders a reason to leave their bed and cell every morning, rather than withdrawing from programs or activities, renouncing themselves and hiding in their cells. Possessing a sense of purpose helps to maintain offenders' positivity. Some of them, like the long-term or life-time prisoners, may find themselves having little or no chance to leave the prison. For these offenders, living with a purpose can transform their self-image, and enable them to be more positive in facing life's challenges as well as nurturing their motivations to transform. In turn, this can help to diminish negative emotions, such as desperation and frustration, which can lead to irrational, distorted or anti-social thoughts and crimes (Burkhead 2007).

Besides a sense of purpose, incarcerated participants also gain self-worth and self-confidence by accomplishing program work. Interviewee E8, a program facilitator who had worked in Australian and British prisons for years, explained the emergence and importance of nourishing self-worth and self-confidence through sustainable programs:

‘What I generally find is that, at the beginning, it’s all about building people’s confidence ... Many of them may have left school in year 10, or just haven’t had a lot of opportunities with education, so the first part is all about building up confidence and showing people they can do this before going onto those practical jobs. They do not have much confidence. This is why they have to prepare and believe in themselves first.’ (Expert Interviewee, E8)

Interviewee E8 suggested that it is necessary to first provide incarcerated participants with basic knowledge or theory prior to engaging in any actual practical tasks or exercises in order to build their confidence. This needs to be a progressive and thoughtful approach to helping participants build positive feelings towards themselves by equipping them with knowledge about their jobs, since many of them might have worked in completely different areas before incarceration. For the programs that do not include educational components but only practical work, participants instead learn to see themselves as possessing the skills, talent and ability required to perform the assigned tasks or to help other living things through their daily work. They come to perceive themselves as more than prisoners: as someone with a meaningful role such as ‘gardener’ or ‘animal trainer’. Even in programs that do not provide a qualification, incarcerated participants gain self-confidence by accumulating hands-on experience and accomplishments (Sohn 2015; Strimple 2003). All these positive feelings pave the way to desistance by challenging the individual’s crime-prone, anti- social characteristics.

- *Psychological Benefit d. Empowerment / autonomy*

Regaining control and autonomy to a reasonable extent is invaluable and a privilege in penal settings. A sustainable program that empowers participants to plan their own tasks and execute them accordingly without much interference from authorities can bring significant benefits. Interviewee O1 shared his experience in an Australian prison that grants incarcerated participants a degree of autonomy in running their TH program:

‘they could decide what to plant, where to seed, when to water, how much to fertilise, when to crop etc. We [prison management] give them a small patch of area [to grow plants] and freedom to work this out ... We would not intervene unless they requested advice.’ (Ex- Prison Officer, O1)

In both TH programs and animal programs, participants are permitted to carry out their jobs in their own way without routinised tasks and procedures to restrict them. Similarly, in animal programs participants can be in charge of training and looking after a pet (Cushing, Williams & Kronick 1995; Furst 2006). They plan for the care of these animals, including walking, eating, grooming and training. Although there are rules and instructors guiding and monitoring their work, the incarcerated caretakers learn from the process what will and will not be accepted while working to achieve their goals in the job. By designing their own work procedures, the participants regain some lost autonomy. This also helps to mitigate the negative effects of institutionalisation and preserve offenders' sense of identity. Other positive emotional states that enable behavioural change, such as feelings of self-worth and being trusted by authorities, can also develop through such empowerment.

All the offenders interviewed for this research were grateful for being granted some autonomy through these programs as they perceived this is a form of recognition from the prison authorities, demonstrating that they are 'eligible' and worthy to be empowered. Interviewee P3 gave very positive feedback about the TH program in which he used to be involved:

'It [the program] is not coercive in any sense. It lets you do the thing that you think is right. It's human being to human being ... with respect, courtesy ... everything is to a different level [comparing to other rehabilitation programs] ... and they [the people involved in the program] said, "Thank you for the change" to me.' (Previous Incarcerated Participant, P3)

This interviewee's experiences evince that even just gaining a degree of autonomy through a program is a critical factor enabling offenders to feel human, confident and respected. Interviewee E3, who had been running a TH program which offered college credits to participants in a US women's prison, extended the autonomy provided to offenders participating in the program:

'[w]hat I try to do is to give them options. Some of them may have bad days. I will give them option A and B, for example, instead of me going on ... I can tell

if they are not good today and if they want to go back to the room ... They are expected to be there [for the program] and on my attendance sheet, or they'll be in trouble. But if they are having problems [that may affect themselves or the program], we will figure it out before escalation.' (Expert Interviewee, E3)

Such autonomy is sometimes needed to demonstrate respect for offenders' emotions and choices, meanwhile increasing their understanding of and empathy towards others. Being housed in a total institution, offenders have no control over their lives, no freedom to walk freely, no choice of cell mate, no ability to complain about prison food, and no choice of clothing (Goffman 1958). All these uncontrollable situations may cause anxiety, frustration and resistance (Wener & Kaminoff 1983), which are counterproductive to desistance. Participating in sustainable programs is probably one of the only ways that offenders can be granted autonomy or empowerment in prison. This 'privilege' helps them to boost their self-esteem and regain a sense of being trusted, respected and human, thus allowing them to develop a more positive attitude and in turn supporting their desistance journey.

6.2 Negative Feelings about the Past

While a forward-looking attitude is essential to personal transformation, reflecting on the past is also a vital step towards desistance. Through TH programs and animal programs, participants learn to care about and reflect on the past, to take responsibility for their actions and to be empathetic to other living things, thereby (re)connecting them to other humans and to their surroundings. It is by taking responsibility for their previous actions and for their program subjects (animals or plants) that participants can come to acknowledge the loss they have suffered and the importance of not reoffending and of desistance. Psychological benefits (*g, h, i*) are found to be more conducive than physical benefits in encouraging offenders to rethink their past.

Physical Benefits

The physical benefits focused on general health, skills development and knowledge building are unlikely to directly contribute to behavioural changes or desistance because they are more future-oriented. These factors involve few components of learning related to the past or to perceiving one's previous behaviour as wrong, even though they may encourage desistance to some extent. Developments of Negative Feelings about the Past,

however, can be enhanced by the psychological benefits discussed below when condemnation is not central to the process.

Psychological Benefits

While there is no physical benefit that leads offenders to rethink their past, the following three psychological benefits can have a significant impact on desistance:

- *Psychological Benefit h. A sense of responsibility*
- *Psychological Benefit g. Empathy*
- *Psychological Benefit i. Being altruistic.*

McCold and Watchel (2003) argue that offenders need empowerment to take responsibility for their actions. It is essential for them to demonstrate that they acknowledge the wrongfulness of the offence and that they take explicit steps to avoid reoffending. The responsibility that is fostered by sustainable programs can be divided into two categories: responsibility towards the program and subjects that are looked after by the offenders, and responsibility in relation to their previous offences. Although the target of the responsibilities is different in each type, the origins of the sense of responsibility in both cases is the nurturing of animals or plants in prison, through which participants grow to be empathetic and altruistic. This new-found sense of empathy and altruism then encourages them to think back and take responsibility for their past actions, in particular their offence/s. Therefore, *psychological benefits g, h and i* are closely related to one another.

Some of the sustainable program routines, like nurturing plants and teaching animals, not only draw upon offenders' sense of responsibility towards themselves, but also simulate relationships between people, such as animals functioning as surrogates for the participant's family members, usually their children. In this regard, Interviewee O1 was pleased to recall scenes of caregivers saying goodbye to their responsible dogs:

‘I’ve seen too many times the guys tearing when the dogs had to go. They called the dogs “baby”, “love”, “dear”, whatever else ... It means a lot for them in prison, a friend, a family ... It’s just too lonely and isolated [in prison].’ (Ex-Prison Officers, O1)

Offenders' past chaotic or deviant lifestyles can seriously restrict their role as carers for

their kids, spouses or parents. Many offenders miss such roles or relationships while in prison, and therefore devote these emotions to the animals they look after, thus establishing deep connections with these animals, as Interviewee O1 described. Taking care of plants and animals allows them to feel that they are recognised and depended upon by another living creature, thus imitating their lives and responsibilities before imprisonment. This is especially significant for incarcerated mothers who have lost the opportunity to raise their children (Sohn 2015). By rearing animals and plants, these women are able to utilise their capacity to care for and look after vulnerable others. Hynes (1996) asserts that ‘families are like gardens. Honour their lives – care for women and children – like you do the plants’ (p. 43). Indeed, close relationships with animals or plants are found to be as intimate as those with one’s family and kids (Cerulo 2009; Woodward & Bauer 2007). The shift of care from family to the companion animal or plant teaches an incarcerated person to consider the welfare of others and to be responsible for these companions, while also allowing them to reflect on the causes of the lost moments with loved ones. The surrogate relationships with subjects through animal or TH programs can thereby trigger a sense of responsibility and altruism.

Offenders often lack the opportunity to take responsibility for their offences by directly compensating their victims or repairing the harm done, physically, financially or symbolically, especially in the case of ‘victimless crimes’ like drug trafficking. Although the community suffers, there is no direct primary victim to whom offenders can make amends. This can limit the opportunity for offenders to show their family, friends or others that they wish to be accountable for their offence. Further, traditional rehabilitation programs that emphasise vocational training may be incapable of igniting a desire to take active responsibility for redemption or for reflecting on the past. Sustainable programs, on the other hand, can alleviate these problems by giving in one’s self-justification and neutralisation scripts through nurturing animals and plants, which will be discussed in more detail later in this chapter. In this regard, Interviewee E1, who was experienced in designing and evaluating TH programs, reinforced that

‘the biggest thing is moving away from being selfish. If you have to think and discuss the nature of the people who you harmed, it isn’t just the victim of crime; it’s your partner; it’s your children; it’s your mates; it’s your workmates; it’s your community; it’s the environment. We often find that when working with people

who have offended that's me, me, me. It's about me getting a program, me getting out of prison, me getting parole, me having a visit with the family. We need to put the conversation more about "Okay, when you meet your family on a visit or when you leave prison, how are you going to explain the loss that they had when you went inside? How did and do you feel?" And so it's a move towards altruism, not self-centredness ... starting from paying back to our nature.' (Expert Interviewee, E1)

This reveals how looking back and reflecting on one's self or life prior to incarceration, and feeling shame for one's previous actions, is not always bad for offenders. Guilt and shame can be a motivation to right past wrongs (LeBel et al. 2008; Leibrich 1996). The important thing is that these feelings are aimed at one's behaviour, and how it impacted other people, rather than internalising one's feelings of shame, which can then contribute to labelling and declining one's self-worth. Previous actions can be a source of learning and growing for offenders, in reconsidering the impact of the offence on all concerned, including and beginning from the environment. The empathy and altruism gained through program participants' commitment to their work and to their subjects encourages a greater sense of responsibility and undermines the tendency to self-justify or neutralise the offending, hence allowing the offender to rethink their previous actions and responsibilities in the offence. Guiding offenders to reflect on their past, take responsibilities (for the past and present) and 'make good' (Maruna 2001) is a vital factor for desistance, and allows offenders to recognise the role they can play in securing public safety.

6.3 De-labelling and Recognition by Significant or Respected Others

To foster desistance, creating a community that accepts released offenders is as crucial as offenders developing positive attitudes towards themselves and negative feelings towards their past wrongdoings. While offenders are undertaking a process of personal transformation while in prison, their efforts need to be seen and acknowledged in order to maintain their motivation to change. If offenders achieve certain qualifications, skills, goals or changes, it is likely that the public will form a different, more positive view of them, and hopefully accept them as part of the wider community. When those who involve in prison programs remove the label of 'offender' and recognise program participants as

responsible citizens, this significantly and positively impacts the change in an offender's public image and supporting their cognitive transformation. There are both physical benefits (*a, b, c, f, h*) and psychological benefits (*h*) that affect the process of de-labelling and recognition, which are discussed below.

Physical Benefits

- *Physical Benefit a. Developing practical / occupational skills*
- *Physical Benefit b. Developing life skills*
- *Physical Benefit c. Developing knowledge / literacy / numeracy*

Acquiring skills and knowledge is essential for rehabilitating offenders during incarceration. Sustainable programs tend to offer more specific knowledge to participants than traditional rehabilitation programs. Apart from growing food, cleaning animal cages, literacy and numeracy learning, some programs also engage participants in science, green technology, food justice and production, plant identification, landscaping, indoor gardening and ecology (Aldridge & Sempik 2002; MacCready 2014). Such programs endeavour to integrate vocational training and knowledge building to ensure a more comprehensive learning outcome and a more consolidated path to desistance. Physical benefits *a* and *c* thus help program participants to stand out and gain recognition from the public, encouraging the de-labelling of offenders as they can demonstrate their newfound capabilities and endeavours which can also reflect their progress of transforming. Since offenders are more likely to be influenced by the pro-social labels applied by respectable figures, such as prison officers or management, desistance will best be fostered where offenders' transformation or achievements are recognised by such respectable and significant others (Maruna et al. 2004).

Physical benefit *b*, on the other hand, equips offenders with excellent life skills that impress prison staff and program facilitators. While all the interviewees in this research agreed that recognition of offenders' advancement is paramount to enabling them to move on, several interviewees specifically raised one area of improvement that they admired the most: the ability to hear and accept constructive criticism. Interviewees E6 and O3, who respectively operated and organised TH programs, described their experiences in this regard:

‘They [the participants] don’t like criticism. Quite often people say, “You didn’t actually like what I’ve done”. I said, “No it’s not about liking or not liking your work. It’s about taking a distance and looking at an objective lens and saying ... you know ... this didn’t work but it’s got nothing to do with you as a person”. Day by day, they become more rational and understanding to people’s comments. It is so, so great to see.’ (Expert Interviewee, E6)

‘They don’t like rejection, don’t like to hear something “no” or “bad” but that’s reality. They’ll find criticism, rejection all the bad things out there ... We have to help them get through this. We need to know how to talk to them, how to not upset them when we want to say no to them. It’s important education. It’s also great to see them finally understand the meanings and purposes of rejection.’ (Ex-Prison Officer, O3)

In sustainable programs with more educational components, such as presentations in class, participants have more opportunities to gain life skills that assist them to survive in the outside world. Learning to take criticism is one example of such skills, as stressed by the interviewees. The two interviewees quoted above had both witnessed their participants’ transformation towards greater acceptance of criticism and observed that explicitly praising participants is vital to help them overcome the challenges on the road to desistance. While this transformation is not related specifically to educational or vocational advancement, it may still impress authorities or communities by indicating the other life skills offenders have gained from these programs.

To make the attainments in education, vocation and gained life skills encouraging to a desistance journey, positive reinforcement has to outweigh punishments and denunciation (Gendreau, Cullen & Bonta 1994). Even if there is only a small group of ‘witnesses’, this is still valuable to program participants because the influential stigmatising label of ‘criminal’ can be removed (Maruna et al. 2004; Trice & Roman 1970), encouraging them to embrace the path of desistance.

- *Physical Benefit f. Reduced substance abuse*
- *Physical Benefit h. Less engagement in illegal activities in prison*

Physical benefits *f* and *h* have shown that even if offenders have not explicitly achieved a lot in the prison programs, so long as they have undergone positive behavioural changes such as less involvement in deviance, the authorities or significant others will be able to recognise their efforts and recognise them as pro-social beings rather than criminals.

Among the five ex-prison officers interviewed, all claimed that participants in sustainable programs exhibit better behaviour and are more rule-abiding. Interviewee O2 made a comparison between participants in sustainable and traditional programs:

‘[s]ome of them [participants in traditional programs] used to use drugs whilst participating in a program or have gotten into fights but those in this [TH] program never ... Getting them out to the gardens does help to divert them from troubles ... but I don’t think it would help prisoners change or reflect if they weren’t involved in the process of maintaining the gardens. It is dependent on whether the participant is ready, willing and wanting to change. It makes it difficult when people are mandated to complete a program because they are all at different stages of change and some may not be ready to change ... You can tell who are ready who are not.’ (Ex-Prison Officer, O2)

From this interviewee’s perspective, offenders who relinquish bad or deviant behaviour are more likely to demonstrate voluntariness or readiness for change. All the five ex-prison officers said that only well-behaved offenders would be chosen for a sustainable program. In general, the ability to engage in a TH program is already a sign of being appreciated by the authorities as it implies that the prisoner is not engaging in illegal activities in prison and is willing to change. And, as mentioned previously, such recognition by prison staff and experts is essential to help offenders achieve desistance. In contrast, the forced involvement of participants who are not ready in any such program can lead to more behavioural or operational problems (see Chapter 9 for further discussion about voluntariness).

As mentioned above, recognition by a small number of respectable or significant people can be a significant contribution to the de-labelling process. Although the frequency of

substance abuse and other illegal activities among prisoners is known primarily only to prison staff rather than community program facilitators or family members, and prison staff are probably the main people who would be able to recognise changes in offender behaviour in this regard, prison officers' positive reinforcement is still indispensable to maintain prisoners' morale and determination to be a better person and work towards desistance. Further, since they are seen as authorities and respectable figures by some community members, officers' positive comments regarding offenders will be influential on the views of these people, the offenders' families and other program facilitators to a certain extent, thus helping to promote a positive image of those offenders in the broader community.

Psychological Benefits

- *Psychological Benefit h. A sense of responsibility*

Psychological benefit *h* assists offenders to move away from recklessness or indifference to their behaviour or to others' rights and instead to become more responsible through working in sustainable programs.

Being responsible for the roles assigned to them and building strong bonds with the environment, plants and animals can undermine the 'less eligible' image of offenders in the public eye. Devoting oneself to one's designated job in a sustainable program can help participants to develop a sense of responsibility and restore the community's trust, so as to be appreciated and once again accepted by the community. Interviewee O3 asserted that his TH program taught participants to better understand responsibilities, obligations and consequences, both within the program and in society more broadly:

'we [prison management] expect you [incarcerated program participants] to behave responsibly. If you take advantage of your opportunities, you will get acknowledged and rewarded for that. If you choose not to be responsible you know there will be consequences for it.' (Ex-Prison Officer, O3)

As per exchange theory, the notion of reciprocity (see Molm & Cook 1995) explains that offenders can only modify the community's image of them and their self-perceptions by taking responsibility for compensating for the harm they have caused for victims and the community, and for righting past wrongs (Bazmore & Stinchcomb 2004). The most

decisive determinant of offenders being accepted as ‘responsible and eligible citizens’ once again therefore depends on the offender’s attitude in recognising the harm done and doing ‘something’ to make amends (Bazmore & Stinchcomb 2004). The ex-prison officers quoted above believed that if program participants have a good sense of responsibility in carrying out their roles and performing their jobs, other people, including staff and community members visiting the prison, will acknowledge their endeavours and provide them with rewards, such as praise, accordingly. The effort of cultivating a garden with care and responsibility is clear as plants wither easily; and the evidence of taking care of or training animals is similarly noticeable in the form of animals’ health and performance. Thus, if such efforts are demonstrated, positive reinforcement of participants’ achievements by others, as a kind of recognition and reward, is paramount in enabling offenders to understand the importance of taking responsibility and the resultant gains, for them and the broader community.

While the specific illegal behaviour rather than the actor should be denounced or labelled as ‘inappropriate or ineligible’ (Tozdan & Briken 2015), the de-labelling process works best when directed towards the offender instead of their particular good behaviour (Ahmed et al. 2001, p. 16) to maximise de-labelling and its impact on desistance and to help the creation of positive identities (Maruna et al. 2004). The pro-social label applied to an offender’s positive characteristics by community members or prison staff can give rise to a ‘self-fulfilling prophecy’ (Tannenbaum 1953), which is affected by self-labelling, meaning that an individual adjusts their behaviour and life in line with the label (Walters 2002). Although self-fulfilling prophecy may create self-stigma, if offenders are recognised as ‘responsible citizens’ by significant and respected others, it is likely that they will adopt this positive label and act accordingly to desist in future, rather than remaining in a state of self-stigma. Being part of a sustainable program gives participants an opportunity to lessen the effects of self-labelling or self-stigmatisation by revealing their capacity to assume responsibility and undertake their work to a good standard. In this regard, the responsibilities of participants in sustainable programs are particularly significant because the lives of other living beings are dependent on them. The appreciation and recognition of offenders by others gained through participation in a sustainable program, can rebuild their pro-social identity and self-esteem which removes the criminal label and also support another key factor influencing desistance, Positive

Feelings about Self and Future (see Section 6.1).

6.4 Strong Pro-Social Relationships with Society

Although sustainable programs bring a range of personal benefits, both physical and psychological, to offenders and assist them to change their public image, participation in these programs does not automatically lead to a positive and close relationship between offenders and communities. The personal benefits may to some extent address the crime-prone mentality of an offender or the social issues they may face after release. Yet, other matters like offenders' mental, familial, interpersonal or social problems, which can hinder successful reintegration and become triggers of re-offending, may be left unattended. Inevitably, developing a strong relationship between the offender and society requires direct and engaged involvement of that offender with other members of society, and the significance of which cannot be found in interaction with plants and animals.

Even though an offender might have become more altruistic and responsible through participation in a sustainable program, with limited profound connection with the community, it will be hard for them to foster strong pro-social relationships with the community, which is needed for their long-term desistance. And while de-labelling and recognition of offenders' work by prison staff or other community members is important, it does not ensure a strong relationship between offenders and 'outsiders'. Since offenders learn to cope with and react to life's challenges through conversations with community members (Allison & Ramaswamy 2016), promoting the personal transformation of an individual offender by itself will neither ensure that they can live harmoniously with their fellow community members nor secure their permanent desistance. Chapter 7 will explore further the need to widen offenders' network with other human beings and for offenders to give back to their community in order to promote social sustainability and desistance.

6.5 Maturation

Among the five key factors driving desistance, maturation is the most controversial factor in the literature, as some criminologists argue that it should not be regarded as explaining desistance due to its vagueness (Maruna 2001; Shover 1985). Maturation is usually linked with aging, suggesting that criminality tends to decrease after the age of 25

(Gluecks & Gluecks 1940). Almost none of the interviewees and little of the existing literature has directly scrutinised maturation and sustainable programs. Nonetheless, below I put forward some of the statements or findings from the literature and the interviewees' responses to suggest the possible impact of sustainable programs on this key factor influencing desistance.

A straightforward idea of maturation is that it is directly related to aging and may include attitudinal changes that can contribute to other key factors influencing desistance. For instance, one may feel shameful or guilty about one's previous offences while aging, so one decides not to hurt people again (McIvor, Murray & Jamieson 2004). This thus contributes to Negative Feelings about the Past, without necessarily acquiring any other psychological benefit or participating in a sustainable program. The causal relationship here is thus reversed: personal benefits are not gained first and then enable desistance; but instead the offender is influenced by one of the desistance factors (that is, Maturation) which then leads to certain psychological benefits, which in turn fosters other factors of desistance. One important point to make here is that aging is different from the process of maturation, which entails mental and behavioural growth; aging does not automatically result in maturation. This section will focus only on how gaining personal benefits can lead to desistance. There are four psychological benefits (*g*, *h*, *i* and *j*), but no physical benefits, found to be related to maturation via participation in sustainable programs.

Physical Benefits

Although maturation may occur in the process of learning new skills and working, there is no data from the interviewees or the literature indicating that the physical benefits listed in Table 6.1 can directly or positively affect the maturation of an offender. TH programs or animal programs may enable them to work more maturely but not necessarily to think or to cope with difficulties in a more mature fashion. The physical benefits that are more related to health, such as *better physical health in general* and *less self-harm*, have even less impact on maturation.

Psychological Benefits

- *Psychological Benefit h. A sense of responsibility*
- *Psychological Benefit g. Empathy*
- *Psychological Benefit i. Being altruistic*

Psychological benefits on the contrary have greater impacts on maturation. Sustainable program participants' sense of responsibility may stem from the empowerment they gain from the program and the improved self-evaluation enabled by their greater connection with animals and plants, as discussed in Section 6.1. Responsibility is also an important aspect of maturation (Graham & Bowling 1995; Rocque 2015). When program participants enjoy their jobs and feel good about themselves in these roles, they will devote more time and effort to the work. As the desistance literature demonstrates, employment can thus be a turning point that transforms one's lifestyle, attitudes and behaviour (Sampson & Laub 1993). Interviewee P3 found a new sense of responsibility in prison by growing vegetables for his fellow inmates:

‘I was a troublemaker. I had nothing to do around [prison] ... [Since joining the program] I could then grow food for myself and others ... if I didn't work, everyone else would not have fresh vegetables to eat.’ (Previous Program Participant, P3)

He understood his responsibility as a gardener and enjoyed his duty, which helped other offenders to sustain a healthy diet. A strong sense of responsibility to the program and to his work motivated this offender to remain on the pro-social path, and the cognitive and behavioural changes he exhibited can be seen as signs of his maturation. This also implies that owning one's responsibilities in relation to work and other living beings can engender empathy and altruism among program participants as they consider the needs of other people, and learn to put themselves in others' shoes.

The development of empathy and altruism can also be manifested through program participants perceiving animals and plants as an extension of themselves, and seeing the changes in animals' lives and growing plants as a reflection of the human lifecycle. Although no interviewee in this research raised this point, many other studies reveal that offenders develop a greater understanding and awareness of the needs of others. The US-

based examples below are worth noting:

‘It’s a good feeling to know they’re [the animals reared in the prison program] going to be released. When you go to a zoo, you see the animals; they’re not really happy.’ (An incarcerated participant of Sustainability in Prison Projects, quoted in Johnson 2012)

‘These dogs didn’t have a chance; we got these dogs from the pound. Most of them are going to get euthanised. I’m in prison, I’m stuck here. This is my last chance ... They’re in the pound, I’m in prison ... We meet up, and what happens? I’ve not only saved their lives but they really saved mine.’ (An incarcerated participant of the Prison Pet Partnership Program, Washington State Corrections Center for Women, quoted in Sohn 2015)

Program participants may perceive the animals they care for as being in a very similar situation to themselves, thereby arousing an intense sympathetic and empathetic attitude. In this regard, homeless animals face the same circumstances as some offenders – being ‘throwaway populations’, discarded by society and left behind (Furst 2006, p. 425). The transformation of other living things observed by the participants can be seen as mirroring the changes needed in their own lives, which lack connection, balance, care and patience – all essential for an individual to grow and mature. This marks one of the first steps towards greater empathy and altruism, and in turn maturation, as a symbiotic relationship is established between carer and subject in which the carer works for the greatest benefits of the subject.

Prison officers and program facilitators have also witnessed offenders’ transformation from being indifferent to anything other than themselves to being altruistic. Interviewee E3 highlighted the sense of sorrow and helplessness that offenders can experience while incarcerated, in response to which many prisoners become self-centred and judgemental, blaming everyone else for their situation. Participating in a TH program can guide such offenders towards a more optimistic and altruistic attitude:

‘It’s good to move them [the participants] away from those bad or sad conversations of losing their children, or how they failed in life, or they deserve

better etc. They lose self- confidence after imprisoned ... Usually they just talk about the prison thing. It's bad. They now have something else to talk about. Talk about something good about gardening, how the plants have grown [under their care]. Something good for themselves, staff and those who benefit from their work.' (Expert Interviewee, E3)

Interviewee E3 believed that because the participants were occupied by 'big tasks' assigned by the authorities and knew that their products would be given to people in need or used for decorations in prison or in the community, they became more caring and confident, and more concerned about their plants and their contribution to the wider community than about their own misfortunes. Lewis (1992, p. 57) states that 'the strength of gardening lies in nurturing. Caring for another living entity is a basic quality of being human'. Owning a responsibility to plants is no less impactful than that to animals. It contributes to offenders' identity and cognitive transformation. If the program participants do not nurture the plants well, the plants may lose the chance to survive and the people benefiting from them will suffer. The belief in the importance of their assigned tasks compels the participants to provide the greatest care to these dependent living things. Such change in thinking and identity not only helps them to gain empathy, altruism and maturity, but also leads them to desistance.

- *Psychological Benefit j. Respecting other people and living things*

About half of the interviewees (P2-P3, O1-O3, E2-E3, E6, E8) observed that respect for others often co-exists with altruism. When an offender discerns the importance of altruism, they will be more likely to respect others, at least the animals and plants they are caring for. An offender in a Kentucky correctional facility asserted that he had learned to be respectful by looking after horses:

'Horses demand respect and through them I've learned respect for life. Some horses we got were on their way to the killers. You never can do enough for them.'
(An incarcerated participant of Kentucky Thoroughbred Foundation, Kentucky, US, quoted in Strimple 2003)

This participant had not only learned greater altruism and empathy, but also came to have more respect for life, as a result of his participation in an animal program. He wanted to

save the horses that would otherwise be killed, as he understood the value of another life and the need to protect it. The interaction between offenders and animals or plants can be the first time they show and experience respect. Previous damaging life experiences, such as living with stigma in mainstream society and living without respect, including self-respect, can be the cause of deviance and criminality among many offenders (Braithwaite 1989; Steels, Goulding & Abbot 2012). Without the experiences of being respected or learning about respect during their lives, reciprocal respect might not develop sufficiently. Rearing animals or plants is thus an effective way to teach offenders how to value respect, for themselves and others, and help them to grow and mature accordingly. Moreover, respect can also be learned through cooperation in programs under proper guidance. Interviewee O4 described his method of building respect in his animal program when dealing with conflicts among participants:

‘[i]n prison, respect is a big thing and means lots of things. That’s just the way of them [the offenders] coping their boundaries ... it’s likely that they smash each other’s boundaries when they feel like it ... so we can do things like, “Okay, we don’t have to like each other but we’ve got to be here so how are we going to work together to do that? The benefits of the dogs have the highest priority. Let’s get this done together”.’ (Ex-Prison Officer, O4)

Participating in sustainable programs allows participants to understand and feel respect while also expressing it. Understanding boundaries and respecting others can reduce antagonism, hostility and conflict among participants and facilitators, as Interviewee O4 spoke of above. Such programs thus provide an opportunity for participants to earn respect, either from animals or other people involved in the programs. Respect can then lead to growth and transformation in prison (Steels, Goulding & Abbot 2012). By working with their subjects in a respectful environment, offenders can learn to relinquish the attitude or way of life where they had disregarded or deprived others’ rights and lives, indicating significant improvements in personal growth and maturity. A redemption script which guides offenders to behave and live in accordance with their new pro- social identity and a productive way of viewing life is subsequently developed for desistance, to be good to animals, plants, people and society (LeBel et al. 2008; Maruna 2001).

6.6 Auxiliary Personal Benefits influencing Desistance

Even though they help program participants in many ways, as discussed above, the personal benefits engendered by sustainable programs are not all directly conducive to desistance. Physical benefits *d*, *e* and *g* and psychological benefits *a* and *b* are also necessary for offenders to survive and explore the road to change, yet their contributions are less straightforward. I have categorised these into Auxiliary Personal Benefits and explain their indirect impact on desistance below.

Physical Benefits

- *Physical Benefit d. Healthier incarcerated lifestyle*
- *Physical Benefit e. Better physical health in general*

The physical benefits *healthier incarcerated lifestyle* and *better physical health in general* evidence that offenders are provided with a safe and stable environment to grow and to steer away from trouble in prison. For example, animal program participants improve their incarcerated life by walking or feeding their animals every day, while TH program participants improve their physical health by consuming the plants they grow. However, less than half of the interviewees spoke of these benefits. For those who did (E1, E5, O1, O3 and O4), nothing related to personal change or desistance was discussed in depth. However, these two benefits are supplementary to help offenders achieve desistance.

Maslow (1943) believes that before an individual can be motivated to grow holistically, their most basic needs must first be met. When one kind of need is met, they will then strive towards the next level of need until they reach the top. This is based on Maslow's explanation for what motivates human behaviour. Figure 6.1 presents Maslow's Hierarchy of Needs Five-Stage Model, which contends that physiological and safety needs are the most fundamental needs to be fulfilled. This suggests that establishing a healthier and less chaotic lifestyle is the vital first step for offenders in changing their lives. If offenders' physical health and lifestyle remains unsafe, they are less likely to acquire the motivation to fulfil more than these basic needs.

Nonetheless, once better health and lifestyle have been achieved, there is more to attain before reaching the top (self-actualisation), including the need for safety, love and esteem. It is clear that health and stability are required to support a process of personal

transformation, but these appear more as steppingstones that lead sustainable program participants to the next stage of need, without exerting any direct influence on the journey to desistance. If an offender can advance their self-actualisation through holistic growth in different areas, such as being problem-centred instead of self-centred and having strong moral or ethical standards (Maslow 1970), desistance will be more attainable as such growth coincides with some of the psychological benefits examined in this chapter.



Figure 6.1 Maslow's Hierarchy of Needs Five-Stage Model (1943)

Physical Benefit g. Less self-harm

While no interviewee in this research mentioned anything related to suicide, there is some, albeit limited research investigating the relation between sustainable programs and self-harm. Lee (1987) has shown that placing animals in prison wards in which offenders have suffered from intense mental health issues, such as depression and non-communication, can reduce offenders' suicide attempts. In Lee's study, the group of offenders with animals indicated zero suicidal attempts while another group who had similar criminal profiles but were living with no animals were found to have eight attempts during the same period of time. Nonetheless, the number of self-harm or suicide cases is influenced by various factors, such as poor coping strategies, coming from a disadvantaged background, life challenges, self-evaluation, family problems, substance use and unfair treatment in prison (see Liebling 1992; Liebling et al. 2005). There is therefore no clear evidence directly attributing physical benefit g to sustainable programs

simply because the offender is a program participant.

Besides, having a healthier incarcerated lifestyle, better physical health and a reduced tendency towards self-harm are physical but very private changes that may only be seen or perceived by the offenders themselves, especially in the case of reduced self-harm and suicide. And these physical improvements do not have much impact on feelings about one's self and one's future in terms of developing a sense of hope, motivation and control, which are the main elements of having positive feelings about self and future. On the contrary, less self-harm may be the result of other personal benefits such as *improved confidence, self-esteem, self-worth or accomplishment*. Furthermore, although these changes can also be discernible by 'significant or respected others', such as volunteers or prison officers, usually no 'criminal label' is placed on individuals who attempt suicide, in particular as some people may not realise that suicide is a crime in some countries or in someone's beliefs. When the act is not seen as illegal, eliminating such behaviour will not lead to de-labelling or recognition. Therefore, the factor De-labelling and Recognition by Significant or Respected Others is rarely manifested as a result of less self-harm, diminishing the connection between reducing self-harm or suicidal attempts and desistance.

Despite the limited direct contribution of physical benefit *g* to encouraging desistance, sustainable programs can help to keep incarcerated offenders alive and mentally healthy, which is often a challenge. Hence, if these programs can prevent offenders from engaging in self-harm or attempting suicide, it is reasonable to encourage their use more widely.

Psychological Benefits

- *Psychological Benefit a. Reduced depression / anxiety / stress*
- *Psychological Benefit b. Calming / reduced aggression / a sense of serenity / improved self-control / patience*

Similarly, psychological benefits *a* and *b*, which are frequently reported as typical outcomes of sustainable programs, play a part in transforming an offender, but are not particularly significant in affecting desistance. Depression, anxiety and excessive stress may lead to suicidal attempts. These negative emotions can also limit behavioural

changes and reinforce the irrational or distorted thoughts and beliefs that lead to offending, as discussed in Section 6.1. Thus, helping incarcerated offenders to relieve stress and other negative emotions is as essential as developing a calmer penal environment, where peace can be found through less stress, aggression or violence. Nonetheless, removing negative emotional states may not be immediately influential on desistance because the development of rational thoughts or reasoning has precedence over emotional changes (Beck 1976; Burkhead 2007).

As suggested by Beck (1976) and Burkhead (2007), negative emotions can be consequences and also causes of irrational or distorted thoughts and beliefs. Simply eliminating negative emotions appears to be ineffective in promoting positive changes in behaviour or desistance because the irrational or distorted thoughts that sustain crime prone traits and hinder positive emotional change remain unaddressed. In this context, according to Maruna (2001), any behavioural change will not translate into ‘long-term abstinence from crime’ but will instead reflect merely a temporary cessation of offending. The provisional behavioural changes in prisons may stem from restrictions related to prison regulations, power, offender movements, resources and offenders’ connections with the outside world. Thus, these temporary cooperative attitudes and behaviour may not extend to offenders’ post-release life when these restrictions are removed. If released offenders have not genuinely transformed their perceptions of self and future, or learned of the importance of living with moral reasoning and discarding distorted or problematic thoughts, they may again indulge in deviant or illegal lifestyles when the control imposed by the authorities is removed. Therefore, addressing offenders’ negative emotions is necessary but it needs to begin with managing the root causes of such emotions. In this regard, Beck (1976) has shown that emotions are formed by one’s thoughts about self, current experiences and perceptions of the future. This confirms transformation is needed across all three realms so that the irrational thoughts and negative emotions can be addressed while also paving the way for desistance. The personal benefits that contribute to Positive Feelings about Self and Future thus help the offender to counteract the negativity in their life and to build hope for their future while also adopting a pro-social mentality. This would be a more pragmatic and effective process of achieving desistance compared with the temporary transformation enabled by seeking to change one’s emotions.

Conclusion

Securing a livelihood for oneself through employment and further education is argued to be an important part of promoting personal sustainability (Muasya 2013). Additionally, offenders' cognitive reasoning needs to be improved in order to avoid their personal transformation in prison fading after their release and to promote permanent desistance. Maintaining hope, self-efficacy and motivation are some of the factors that can support pro-social behavioural change (LeBel et al. 2008; Maruna & Immerigeon 2004). Changes in attitude and behaviour are positive signs that an offender is taking a path of desistance but there are external factors that may obstruct their journey. In this regard, if offenders have strengthened their human capital and sustained the personal benefits gained from sustainable programs, they will be more likely to develop personal sustainability and to be able to cope with life's challenges without breaking the law.

To maximise the chances of achieving permanent desistance, the five key factors driving desistance need to be comprehensively fostered. All the potential personal benefits of TH programs and animal programs discussed in this chapter have a positive impact on desistance, albeit to different degrees: some have a direct effect while some only influence desistance indirectly. When connecting the personal benefits listed in Table 6.1 with the five key factors shaping desistance, it is evident that sustainable programs, at best, help to partially enable four of the five key factors: Positive Feelings about Self and Future, Negative Feelings about the Past, De-labelling and Recognition by Significant or Respected Others, and Maturation. The physical benefits of participating in a sustainable program are mainly based in skills and knowledge enhancement through job training and education. Hence, it is more likely that these benefits will support offenders to lead a brighter future and maintain a more positive self-perception instead of sustaining a shameful past. The psychological benefits, in contrast, assist offenders to deal with their distorted thoughts and emotional problems that contribute to offending (Burkhead 2007). By substituting the distorted mindset with pro-social and rational reasoning through participation in sustainable programs, offenders can change their attitude from only considering themselves to caring about others (both human and non-human living beings) and learn to take responsibility for their previous actions. If their transformation is recognised by respected community members or significant others, offenders will be

keener to stay on the desisting path as they come to be de-labelled as criminals and instead regarded as responsible citizens.

While many of the personal benefits derived from sustainable programs facilitate the key factors that determine desistance to a certain extent, some of them may be auxiliary to desistance. Direct involvement in nature-related activities can reduce participants' engagement in a harmful lifestyle, reduce their tendency to self-harm or attempt suicide, and diminish their involvement in substance abuse or other illegal activities (Lindemuth 2007). As discussed above, discontinuing drug use or involvement in illegal activities could lead to the offender gaining recognition from community members working with them and encourage desistance as the participants choose to steer clear of 'illegality' and instead become law-abiding. Nonetheless, three physical benefits – *healthier incarcerated lifestyle*, *better physical health in general* and *less tendency to self-harm* – may not be as influential on desistance as abandoning the universally agreed 'illegal activities' because the labels that these offenders detach themselves from tend to be 'insane' and 'weak' but not 'illegal'. Therefore, the removal of such labels may not yield de-labelling and these changes can be too minor or internal to be recognised by the public. Similarly, some psychological benefits that help reduce offenders' stress and aggression could be less impactful on desistance than others because the determinant of the process of emotional change (that is, adopting rational thoughts and reasoning) is missing, hence such positive emotional transformation may not be sufficiently enduring to facilitate permanent desistance.

To sum up, to encourage desistance by developing one's personal sustainability, both physical and psychological benefits are required. A sustainable program, whether a TH program or an animal program, that offers quality education, vocational training, cognitive transformation and support is conducive to offenders' personal growth and desisting lifestyle. However, the personal benefits deriving from such programs may not be enough to enable the participant to transform holistically or permanently, and thereby to ensure the offender maintains their journey to desistance or fully reintegrates into society, especially in relation to developing Strong Pro-Social Relationships with Society. The next chapter will therefore explore how social benefits can help to compensate for the inadequacies of personal benefits in facilitating desistance.

Chapter 7 Social Sustainability

The previous chapter investigated the contributions of two types of personal benefits (physical and psychological) to advancing personal sustainability, which potentially have a positive impact on a prisoner's mental and/or physical health. This was discussed in relation to TH programs and animal programs. It was also argued that the physical and psychological benefits of participating in such programs were not limited to sustainability, but also facilitated desistance, which was primarily discussed in relation to five key factors. This chapter will build on that discussion, by exploring *social sustainability*, which is the second of the four aspects of sustainability that frame this thesis. In the discourse of sustainability, social sustainability has often been neglected despite its importance in social development (Woodcraft, Hackett & Caistor-Arendar 2011). This chapter advances the debate on social sustainability by considering it within the penal context. Specifically, it investigates the relationship between social sustainability and desistance for the first time, making an original and important contribution to the field of criminology.

Advocates of social sustainability argue that a society should not only secure national profit or individuals' income, but also equity, liveability and coherence (Littig & Griessler 2005; McKenzie 2004). The aim is to foster a society that supports citizens of both current and future generations through a community that maintains high living standards in all areas of life. Diversity, connection and justice are fundamental to social sustainability (McKenzie 2004). In order to enhance or achieve this form of sustainability, social capital, which entails numerous sociological concepts such as social cohesion, integration and support (Requena 2003), needs to be nurtured. Social capital appears as socially structured relations between people, within families and across all other social settings that bring together community members (Hagan & McCarthy 1997) by promoting the same norms, values and understandings in order to cultivate social cohesion (Organisation for Economic Co-operation and Development 2001, p. 41; Scrivens & Smith 2013; see Chapter 2 for more details). Differing from human capital, social capital emphasises relations among individuals rather than within oneself

(Edwards & Foley 1998). It values reciprocity and social networking, which connect people of both similar and different backgrounds (Dekker & Uslaner 2001).

The connections created between and within groups through social sustainability can be seen to protect against social isolation, which can severely hinder one's wellbeing (Kelly et al. 2012, p. 3), thereby potentially addressing a crucial issue facing offenders in prison. Offenders often lack social support or social involvement in their incarcerated lives and post-incarceration while struggling with their desistance journeys, restricting the growth of their social capital. It is therefore argued that offender transformation should not take place solely within the individual, but it should also be carried out around the individual. Incarcerated offenders need to connect with non-offenders and link with the outside world in order to bridge their micro changes to a macro level of life, as most will return to their communities one day. Previous research on sustainable programs in prisons has shown that the furtherance of social sustainability tends to be more effective within these programs than conventional programs that focus only on the individual offender because there is a greater potential for sustainable program participants to connect and interact with their communities (see examples Fournier, Geller & Fortney 2007; Kohl 2012; Sohn 2015). Therefore, social capital is anticipated to be more advanced in sustainable programs as they enhance the social benefits that have a positive impact on desistance.

By examining the impact of the social benefits of TH programs and animal programs in relation to the five key factors influencing desistance drawn from the literature, this chapter explores how social sustainability can be maximised through the use of such programs in prisons and how it enhances offenders' motivation to desist. Table 7.1 depicts the eight social benefits and their corresponding desistance factors. Both secondary and primary data based on the views and experiences of previous program participants, ex-prison officers and program facilitators will again be applied to evidence the benefits of and problems associated with these social benefits and their relationship to desistance.

Table 7.1 Linking Social Benefits to the Five Key Factors influencing Desistance

Key Factors of Desistance	Social Benefits
Positive Feelings about Self and Future	a. Better cooperation / communication / interaction with other people b. Improved social connection / relationship / inclusion / networking
Negative Feelings about the Past	-
De-labelling and Recognition by Significant or Respected Others	c. Respecting other people and living things d. Contributing to the community / promoting the common good
Strong Pro-Social relationships with Society	a. Better cooperation / communication / interaction with other people b. Improved social connection / relationship / inclusion / networking c. Respecting other people and living things d. Contributing to the community / promoting the common good e. Being altruistic

	g. Normalisation (for both offenders and the communities) h. Pursuing social justice
Maturation	-
Auxiliary Social Benefits influencing Desistance (Do Not Directly Contribute to Desistance)	f. Reduced recidivism

7.1 Positive Feelings about Self and Future

Gaining positive feelings towards oneself and one's future appears to be an individual and internal matter. Nonetheless, establishing this more positive outlook may require the assistance of other people, in particular for offenders who lack self-respect or self-esteem. Increasing offenders' interactions and connections with their pro-social peers, prison staff, program facilitators or other visiting community members can also support positive changes in an offender's self-perception.

- *Social Benefit a. Better cooperation / communication / interaction with other people*
- *Social Benefit b. Improved social connection / relationship / inclusion / networking*

TH programs and animal programs serve to initiate social interaction and networking among participating offenders and people around them (Furst 2006; Holmes 2017; MacCready 2014). Most incarcerated offenders do not have many activities in their day, and few opportunities for positive social interaction. When they are locked inside their cell for long periods of time, life and time can become blurred, making it more difficult for them to trust or develop relationships with others in the prison (Sohn 2015). Further, some offenders might also have had negative experiences with other people prior to their incarceration. As a consequence, it can be difficult to persuade them to befriend or socialise with people around them or comprehend the need to become a law-abiding community member. In the long term, a sense of isolation and loneliness can accumulate, thus further alienating offenders from socialisation and hampering their wellbeing and desistance journey (Kohl 2012; Palich & Edmonds 2013). Social benefits *a* and *b* work

together to reduce these negative impacts on offenders by forming a bridge between them and other people through their participation in TH programs and animal programs.

Working with plants and animals can also initiate a surrogate social relationship, where offenders can experience less intimidation and fear than they might in interactions with other humans. Plants or animals do not reject, label, or hate offenders. In the prison context, where care, acceptance and affection are usually missing, these living things become surrogates for reciprocal interaction and genuine communication. Interviewee P4, a former prisoner, raised his lack of understanding of socialisation in prison before partaking in the animal program, and suggested that the program would be a good start for offenders with socialisation difficulties, whether acquired before or during imprisonment, to learn how to engage in healthy relationships and gradually become more receptive to being approached by others:

‘I didn’t understand, totally. Why they [other offenders involved in the animal program] looked so happy? Why they could laugh out [loud] in prison? Why the guards were so nice to them? How they could smile and chat with each other [the prison guards and program participants]? It was just unbelievable and crazy ... until myself became part of this [program].’ (Previous Program Participant, P4)

Interviewee P4’s experience supports the notion that sustainable programs encourage offenders to engage in non-threatening physical interactions, beginning with interactions with animals and plants, and help participants to develop better social and communication skills as well as strengthening their networking skills. Some offenders who experience socialisation issues or verbal difficulties may become more talkative after joining these programs since tending to plants and animals helps to begin conversation between the participants, their peers, prison staff and visitors (Furst 2006; Graham 2000, p. 250; Richards & Kafami 1999). Program participants tend to be asked about their jobs, their responsibilities and the condition of their tending plants or animals by staff or peers. For example, offenders who walk a dog around the prison are frequently stopped by officers or peers who wish to pet the animal or to have a brief conversation about it (Sohn 2015). This encourages uncommunicative or asocial people, whether the caregivers or others, to get involved in a conversation. Participants can share their experiences in the program, while others might ask about the program or the participant’s

role within it. Caring for plants or animals therefore not only fosters human–plant or human–animal relationships, but also connects humans to each other by leading to conversations and interactions, as well as fostering a more harmonious and supportive penal environment that will ultimately facilitate desistance.

These improved relationships with people both inside and outside prison further benefit offenders by encouraging them to appreciate responsible citizenship. It is argued that the notion of rehabilitation is constructed and learned through the interaction between an individual and their significant others (Shover 1996, p. 144). Apart from having better communication and interaction with other prison offenders and staff, studies have found that desisters are also more likely to actively aim for a better life post release instead of returning to the deviant lifestyle (Farrall 2002; Giordano, Cernovich & Rudolph 2002). In this regard, Farrall (2002) suggests that the desistance journey can be sustained if the prison or probation officers can make use of offenders' wish to conform. A desire to conform with positive citizenship may drive the creation of a redemption script by the offender who would like to act accordingly to create a new sense of self in order to desist and transform into a responsible citizen. Interviewee P3 spoke of his motivation to participate in a sustainable program, which was influenced by another incarcerated participant:

‘there was a guy [from the TH program] got a job not long after leaving [the prison]. I was thinking, he did more serious and horrible things than me, he got longer time [in prison] than me. If he can do it, why can't I?’ (Previous Program Participant, P3)

Thus, role modelling and reinforcement yielded from positive social contacts are vital in prison (Crighton & Towl 2008). The existence of a role model whom the offender can learn from, as described by Interviewee P3 above, represents an effective approach to transformation and desistance. If an offender hopes to transform themselves and at the same time realises that the behaviour and attitude of the role model are socially acceptable, they may then be encouraged to create a similar redemption script to follow. In particular, when offenders witness their peers, as role models, achieving certain goals in prison, they will be more likely to have faith in their own efforts towards reaching the

same destination or their own goals. Hence, peer influence can be a strong motivation for offenders to strive for a better self and brighter future.

Furthermore, peer cooperation and communication can be an effective channel to cultivate offenders' mutual understandings insofar as universality can be seen among this group of people. Interviewee O3, a former prison officer, spoke of the power of cooperation in prison:

'I love to see the plants and the person [the participating offender] grow together ... There was a plant dying and they all tried to save it. They did everything they could to help. Finally, the plant survived. That was a pride to them. We quite often gave them compliments and they were so happy. Their families and other boys [other offenders] were very interested in what they were doing ... [with compliments and appreciation] they put in even more.' (Ex-Prison Officer, O3)

In this incident, the program participants learned of the importance of not giving up – not just on the plants but also on themselves. Many offenders share similar stories and life experiences that have led to their offending and incarceration, and which worry them and may challenge them in future. Therefore, working closely as a group with people of the same kind allows them to share learning experiences, provide mutual support and develop more positive emotions (Crighton & Towl 2008; Sharry 2007; Yalom 1985) that will reinforce their desistance. The gardening experience they gain in TH programs give offenders an understanding of life: plants need nourishment, care and sometimes a second chance, as do themselves. The offenders are not deprived of the right to change or grow during imprisonment. When they see their peers and other living things thriving and improving their lives, they will be more prone to develop positive feelings towards themselves, such as confidence and encouragement, and to pursue desistance by mirroring the life-changing achievements of others. Thus, the role of plants and animals in these programs can be understood as a medium, encouraging offenders to gradually connect with other humans and learn to desist by interacting with and being supported by their role model peers and other pro-social community members.

7.2 Negative Feelings about the Past

Social sustainability is forward-looking insofar as it ensures ‘the sustenance of the diverse social relations that exist in healthy communities’ (Palich & Edmonds 2013, p. 1). This implies that sustaining physical, cultural and social entities to support individuals’ wellbeing and fostering a harmonious community should engage all members of the community. The social benefits presented in Table 3.2, which focus on developing relationships, securing social values, improving social wellbeing and addressing social needs, are more concerned with the future than with the past. According to Interviewee O5, this could be attributed to the fact that program facilitators do not want participants to look back to their past:

‘We don’t invite conversation around their crimes because once they get into our [animal] programs, we don’t care what they did. It’s not our place to judge them for what they did. Our place is to build them back up, together with the dogs, and [help them] to [be] responsible citizens again.’ (Ex-Prison Officer, O5)

While this philosophy strives not to stigmatise participants’ previous behaviour or demotivate them to change by avoiding discussions on the past, it also diminishes the opportunity to learn from the past or redress the harm done by the offence. Although social benefits like *contributing to the community / promoting the common good* are regarded as a form of redemption, the interviewees emphasised the need to do good within the community in future rather than reflecting on the offender’s previous wrongdoings or harms done (see Section 7.4 for further discussion on this). Thus, offenders could be asked to connect with and contribute to the community, but the elements of reflection are not as profound as those that arise from the personal benefits discussed in Chapter 6. They may be willing to change and conform with conventional social values but less likely to think back or feel bad about their past when program facilitators like Interviewee O5 seek to avoid such reflection. Therefore, despite the benefits gained on a macro social level from direct or indirect involvement in sustainable programs, offenders are less likely to have negative feelings about their past through establishing social sustainability.

7.3 De-labelling and Recognition by Significant or Respected Others

Desistance will most likely be permanent when offenders' transforming acts are recognised by others (Trice & Roman 1970) who can 'certify' them as a changed person or non-offender via a de-labelling process (Meisenhelder 1977, p. 329). Labelling theory proposes that deviant behaviour will be further reinforced by the attachment of negative stereotypes and criminal labels, implying that chronic offending is in part a response to society's labelling (Lemert 1951). De-labelling is similar to labelling: the labelled person will act equally according to the positive label and the negative label. Thus, to maximise the (de-)labelling effect on an individual, their characters as a person instead of their behaviour should be emphasised (Ahmed et al. 2001, p. 16). If offenders are labelled as or criticised for being a deviant person, they are more likely to take on that label. In the same vein, if they are praised and recognised as a pro-social person, and not simply judged by their behaviour at that moment, they will tend to believe in themselves more as a non-deviant and eligible community member and hence maintain a positive identity (Ahmed et al. 2001; Maruna et al. 2004). Nonetheless, it would seem that it is easier to create a deviant than it is to produce a rehabilitated or transformed person (Maruna et al. 2004). Recognising an offender as 'good' or 'reformed' may require a hundred pro-social or non-deviant acts, but labelling a person as a criminal, offender or deviant only seems to need one single 'bad', 'deviant' or 'illegal' act (Skowronski & Carlson 1989). De-labelling can be achieved gradually by facilitating social benefits *c -respecting other people and living things* and *d - contributing to the community / promoting the common good* within sustainable programs, which delineate how offenders' attitudes and behaviour towards communities can alter their public image.

- *Social Benefit d. Contributing to the community / promoting the common good*

In addition to the government or state, the community is also a victim of an offence. A community is described as a social platform 'in which people know and care for one another' (Etzioni 1995, p. 31). An offence hurts the members of a community and the relationship between them. To repair this relationship, commonality must be (re)established. A sense of commonality refers to the feeling that

‘we are alongside people who think like us, make choices like ours, value the things that we value. We need to feel that we are understood by others, and that others approve our thoughts and deeds. Our sense of ourselves is built up through reflection on the reactions of other people to us.’ (Hudson 2003, p. 95).

When the foundation of commonality is poorly developed, some of the virtues of a liberal country will be rotten and distorted. For instance, self-determination would become selfishness, competition would evolve into combat, and competitors would become foes (Walgrave 2008, p. 77). Sharing common values, interests and commitments facilitates benign association and cooperation among community members, consolidating each member’s responsibility for bettering their society (Relf 1998, p. 29 quoted in Sandel 2004). Yet, traditional rehabilitation programs are less likely to concentrate on promoting commonality as they emphasise skills building and increasing employability (which are important yet insufficient for ensuring desistance, as discussed in Chapter 6), offering limited opportunities for offenders to understand commonality or social values.

Sustainable programs, on the other hand, may actively involve outside community members, other than program facilitators or volunteers, in the process, to boost the community’s appreciation of the participants’ work and contributions, as well as the value of public education, in order to yield the best de-labelling effect. Interviewee O1 was part of the prison management that had promoted community involvement, especially of the participants’ significant others, in the TH program during his tenure:

‘we involved the community as much as we could, around parenting, group activities, so the mums can bring children in, leave them with dad, so the whole environment is very much engaging and encouraging ... Their family could come to prison to see what they have done with the time there and how to make things good.’ (Ex-Prison Officer, O1)

The family involved in this case had the opportunity to learn about the brand-new side of their loved one, including what skills and knowledge they had gained from the program, how the products they had grown contributed to the broader community and how the prison staff or program facilitators commented on them. With such community involvement, the changes offenders experience by partaking in these programs can be

patently witnessed by their significant others who come to visit, and from there the corresponding recognition of this transformation might emerge to help de-label the offenders as ‘criminals’ and further motivate them to desist.

In the US, beyond growing vegetables for in-need community members, there are other types of horticulture-related tasks assigned in prison programs that allow offenders to redeem and transform themselves and contribute to their communities. For instance, the GreenHouse Program at Rikers Island jail in New York runs diverse activities to enable its inmates to contribute to and connect with the community:

‘inmates will not only rehabilitate themselves but rehabilitate damaged plants given to HSNY [the Horticultural Society of New York] by nurseries or landscapers all over the New York region; grow plants (annuals, perennials, herbs and vegetables) for community groups in New York City; from salvaged wood, construct nesting boxes and bat houses for city parks and open space to improve habitat for native wildlife; build rooftop gardens in jail that will later be reassembled for city schools or community groups; and after their release, bring their gardening skills back to their families and neighbourhoods.’ (Jiler 2009, p. 180)

The incarcerated participants of Rikers Island jail have contributed in a range of ways to community groups that need help or lack resources. Another US-based TH program has collaborated with local universities to provide more formal and practical training to offenders from which they can obtain public certification of their changes. In this program, about ten of the incarcerated participants volunteer four times annually to assist community members with plant sales at an open event, which promotes greater public understanding of sustainable programs and offender transformation via face-to-face interactions. Participating offenders also contribute by using cost-effective ways to grow plants and donating them to schools, thus alleviating the high cost of purchasing plants (MacCready 2014). Such work for the community encourages the public to alter its poor opinion of offenders and attach a positive label to them. Although general community members may not always be considered significant or respected others by the offenders, offenders’ enhanced reputations can be conveyed by these parties to prison staff or program facilitators who have comparatively close contact and relationships with these

offenders. Scepticism about offenders' ability to transform, which can come from offenders themselves or from others, can exponentially reduce the probability of desistance and increase reoffending rates (Maruna et al. 2004). A self-fulfilling prophecy or stigma from the public may lead offenders who are endeavouring to change away from desistance as they lack the faith or support needed to pursue a better life and desistance. It is hence vital to highlight and promulgate offenders' strengths, and not merely the potential risks they may impose on society (Toch 2000), so that they can reform their public image and regain the trust of the community. Explicit recognition of their efforts and positive labelling of their changed identity can help offenders to face the difficulties of returning to their communities and staying on the path to desistance (Maruna et al. 2004).

- *Social Benefit c. Respecting other people and living things*

Respect is usually difficult for offenders to earn, particularly in prison. While communities demand respect from offenders, incarcerated offenders are often not entitled to respect, especially in Anglophone prisons (Pratt & Eriksson 2013). In this context, sustainable programs provide a space for offenders to demonstrate their understanding of respect in order to gain respect from their significant and respected others. It is not rare that offenders are stigmatised and even hated, both outside and inside prison. Prison officers generally dislike offenders and vice versa (Eriksson 2015). Interviewee O5, who had worked in the penal field for decades, admitted that:

‘Lots of us [officers] really hate sex offenders. We generally feel disgusted to serve them or help them.’ (Ex-Prison Officer, O5)

The words of Interviewee O5 here suggest that hatred towards certain offenders may be the norm in prison. Some offenders, most often sex offenders, are the targets of hatred and bullying in prisons (Ireland 2000; Schwaebe, 2005; Van den Berg 2018). Not only are they discriminated against by their peers, but prison staff are often not respectful towards them as well. And any offender may face such hostility while in prison.

Sustainable programs can alter staff's perceptions of and attitudes towards participating offenders via the familiarity and connection fostered through daily observations and

informal interactions. Interviewee O3 elaborated on the power of sustainable programs in helping offenders to establish a respectable role for themselves in prison:

‘When I first got into the [TH] program, I was expecting those more well-behaved prisoners, that meant those committed less serious crime because there was screening for the program ... I got to know them more, they told me the crime they were serving for, I was really shocked ... they never looked like a sex offender or murderer ... they are showing care and sentiment to the plants. They are not cold-blooded ... and they worked so well and behaved so well ... I really appreciated.’ (Ex-Prison Officer, O3)

Interviewee O3’s experience reveals how participants’ efforts and the personal changes enabled by their participation in sustainable programs can indeed ameliorate others’ negative impressions or perceptions of them. Many offenders do not have respect for themselves, let alone for other people. It is therefore not surprising that they are considered ‘cold-blooded’ or lacking in empathy by people like Interviewee O3. However, when they learn how to look after a plant or animal carefully, how to think for them and nourish them, they are in effect becoming more ‘human’, and thereby more likely to receive praise and respect from prison staff. While there may always be a distance between staff and offenders in different ways, quality interactions and communications bring mutual respect to both sides, despite such distance (Eriksson 2015). Sustainable programs offer an informal platform for each of these parties to understand and shift the embedded perceptions of each other. Staff can see the good side of offenders’ hearts through their efforts in taking care of plants and animals, which would hardly be shown in traditional prison jobs like carpentry. It is argued that if prison staff treat offenders respectfully and humanely, there will be less misconduct among offenders (Eriksson 2015; Reisig & Mesko 2009). Positive offender–staff relationships, in contrast, can benefit the psychological wellbeing of both offenders and staff. Changes in staff attitudes or perceptions towards offenders are no less important than changes in offender behaviour. The improved interactions and communication between the two sides thus minimise the dehumanisation that otherwise prevails in prison and the corresponding distance between offenders and staff, while fostering greater trust and respect between all.

Interviewee P3, a former program participant, observed how participating in an animal program changed his prison life and helped him to feel human again:

‘I joined other rehab programs too ... but they don’t make any difference ... The [animal] program didn’t teach you like a scum. They talked to you like a human being. Unlike dictatorship. They are not coercive in any sense. They didn’t make me [do anything]. They would say, “Thank you for the change”. It’s human being to human being. Respect, courtesy, everything is to a different level.’ (Previous Program Participant, P3)

Interviewee P3’s story supports the contention that gaining the respect of prison staff has a positive influence on offenders’ lives and he commented that he had never received the same level of respect when participating in traditional rehabilitation programs. As posited by Social Exchange Theory, people will repeat the acts that have brought them rewards or positive outcomes. Homans (1974, p. 22-23) asserts that ‘[i]f in the past the occurrence of a particular stimulus, or set of stimuli, has been the occasion on which a person’s action has been rewarded, then the more similar the present stimuli are to the past ones, the more likely the person is to perform the action, or some similar action, now’. He proposes that the more valuable the outcome of their act, the more likely it will be that the individual will perform accordingly again (Homans 1974, p. 25). As respect and recognition from prison staff is not bestowed on offenders unconditionally, it may be a kind of ‘privilege’ in prison. This valuable reward may thus encourage offenders to repeat the rewarded behaviour in future.

While respect, recognition or de-labelling is possible to be gained through contributing to sustainable programs, it is crucial to not relinquish the reality that one’s effort will not always receive the same level of reinforcement and that merely participating in sustainable programs is not going to wash away all the negative or harmful components of a prison. When the participating offenders return to their cells, typical undesirable elements of incarceration such as bullies, prejudice, hatred, discrimination and maltreatment from either staff or peers may surround them (Dalal 2021). The programs may be helping them to leave these negative affiliations for a certain period of time in a day, but do not guarantee that these issues will not adversely affect their desistance

journeys and hence hinder their positive changes made in the programs.

7.4 Strong Pro-Social relationships with Society

Being socially and culturally accepted is essential for the health and wellbeing of humans. These intangible factors can be more influential and important than financial gains since social relationships appear to be more effective in sustaining a better life and healthier wellbeing (Kelly et al. 2012). Insufficient social connection can cause loneliness and isolation, which are particularly harmful to offenders who need the support offered through such connection in order to desist (Hart 2000, p. 60). Without social connection, offenders' physical and mental health can be damaged and their efforts at building a sense of community and seeking to belong will be thwarted (Kelly et al. 2012; Palich & Edmonds 2013). Offenders thus need to be supported to cultivate a range of pro-social relationships with other people while developing their desistance journeys, in particular relationships between offenders and their significant others (Toch 2000). However, in addition to relationships with family and friends, connecting with other people in society is also necessary for cultivating pro-social attitudes comprehensively. Such connections should not be limited to offenders' significant ones only but ideally to be extended to other community members.

While Sampson and Laub (1993) highlight that the two most important adult social institutions that motivate offenders to invest in pro-social relationships are marriage and employment, which then facilitate offenders' desistance, social networking with community members other than one's spouse and employers is also vital for desisting offenders and to enable informal social control.

There is hardly one single trigger that can transform someone comprehensively. Thus, personal change and sustained desistance requires a continuous process of transformation, adaptation and reintegration, with the involvement, support and interactions with the community during and post incarceration. In this sense, sustainable programs that integrate plants and animals into offenders' lives enhance relationships not only between offenders and their subjects or significant others but also between offenders and other people inside or even outside prison, and this process of pro-social relationship building will facilitate the important determinants of desistance – development of a positive new identity and adaptation to new roles.

- *Social Benefit a. Better cooperation / communication / interaction with other people*
- *Social Benefit b. Improved social connection / relationship / inclusion / networking*
- *Social Benefit c. Respecting other people and living things*
- *Social Benefit e. Being altruistic*

Social benefits *a* and *b*, which have been shown to contribute to ‘Positive Feelings about Self and Future’ in Section 7.1, are also conducive to offenders developing pro-social relationships within the community. The Insight Garden Program (IGP) described the prison garden as ‘one of the only nonsegregated areas on the prison yard’, where ‘a racially integrated space’ can be created (MacCready 2014, p. 106) to include offenders of diverse backgrounds. In addition to being able to help offenders establish surrogate relationships (see Section 6.2), evidence has shown that working with plants and animals can bring people with different roles in prison together and help withdrawn prisoners become less anti-social. An animal program participant in the US acknowledged that his role in the program encouraged him to engage in conversation with others, such as answering the questions of other offenders about the dog he was looking after, and improved his socialisation and communication abilities:

‘I had to answer 20,000 questions, the same ones over and over and, you know, it taught me to be more patient ... I taught myself to stop and be sociable and explain to them, even if it was the thousandth time that I had said it that day, and to realise it’s not about me and what I’m doing. It’s what I’m doing for someone else.’ (An incarcerated participant of the Indiana Canine Assistant and Adolescent Network in the US, quoted in Turner 2007, p. 39)

Such engagement can be challenging for offenders who are not keen on socialisation or not good at building up relationships with other people. Through everyday conversations with non- participating offenders, peer communication is enhanced through passionate discussion about participants’ duties in the programs and the outcomes of their efforts. These programs may also lead to participants gaining other virtues such as patience and altruism that may emerge alongside better socialisation (social benefits *c*, *d* and *e* are discussed further below). More importantly, improved communication and interactions not only occur between offenders, but also between offenders and pro-social community

members like prison staff.

The ‘community’ not only includes citizens outside prison; prison officers also of course constitute members of the outside community. To build better social connections, both staff and offenders need to have goodwill towards each other, and no hatred or prejudice. Learning about pro-social relationships with prison staff can be achieved more effectively within sustainable programs. Interviewee O2, who organised TH programs, witnessed how the different attitudes towards and treatment of offenders by custodial and non-custodial staff shaped offenders’ reactions and feelings about these staff members:

‘Prisoners will often call non-custodial staff of the program “care bears” because they are here to help them ... prisoners will interact well with anyone that treats them well and kind. You just need to treat them the way you want them to treat you ... not being their boss but their workmates.’ (Ex-Prison Officer, O2)

All the officers interviewed in this research who organised and ran sustainable programs were non-custodial staff. Interviewee O2 believed that her role as a non-custodial officer in the TH program helped her to understand the importance of maintaining good offender–staff relationships for transforming offenders and ensuring a reciprocity of attitude. The quality of interaction between offenders and staff determines the quality of relationship between the two because previous experiences may lead to generalisations about the behaviour and attitudes of a whole group of people. Poor experiences with a particular officer or offender may engender unfavourable feelings towards another officer or offender without specific reason. Nonetheless, Interviewee P1 argued that not all non-custodial staff who run prison programs treat offenders well or help offenders to transform. He recalled his poor experiences of working with non-custodial officers who were coercive and authoritarian in a conventional rehabilitation program that involved limited interactions between staff and participants in the classroom:

‘They [the officers of traditional programs] treat us like a primary school kid. They order, or “require” us to do things. They threaten us sometimes if someone don’t cooperate ... but the garden program is a totally different thing. They discuss with us, guide us, teach us how to do, not what to do.’ (Previous Program Participant, P1)

This illustrates how the nature of interactions and communication between staff and offenders within a sustainable program differs significantly from that of traditional programs. In the former, the atmosphere is less strict and less formal but more interactive, which allows for less rigid and restrictive communications between staff and participants. Interviewee P1, like most sustainable program participants, had undertaken both types of programs. He explained that only the TH program allowed him to feel that he was treated like a different person – not an inmate or a child, but a respectable adult or an employee – because of the development of a fairer and more trusting relationship with prison staff. It appears that offenders are more likely to connect positively with prison officers who have an accepting or non-authoritarian attitude towards them. This increases the likelihood of positive pro-social interactions between both parties and enhances offenders' pro-social identities and relationships, in turn supporting the creation of a lifestyle of desistance.

In order to reconnect offenders with community members other than officers, sustainable programs also enable incarcerated participants to be exposed to real-life social encounters in person, which is much less common in traditional rehabilitation programs. Connecting with people from the outside community is essential to reduce the feeling of being segregated or abandoned while incarcerated. A close relationship with a community member assists offenders to learn the norms or cultures of that community (Kelly et al. 2012). Interviewee P1 agreed with this view, and emphasised what he perceived as the meaninglessness of traditional prison programs, such as anger management and behavioural change programs, that do not encourage meaningful human interactions like TH programs do:

‘I don't know why I need to be there to listen to those things [traditional learning materials]. What they teach is just common sense. Everyone knows it, well at least I know it well ... like “You can't do this to people, you should be kind to people, you should not take others' things without asking” ... I never feel I benefit from those rehab programs. I know all these when I was in primary school ... This [TH] program teaches us how to work with people and handle problems [either by ourselves or with the help of other officers or facilitators]. At least I don't learn

this in primary school.’ (Previous Program Participant, P1)

Interviewee P1’s comments suggest that questioning what a person perceives as right or wrong in the context of a rehabilitation program may not in fact help offenders to desist as they will likely already know what is legally right and wrong. What is more important to address or resolve is why an offender would choose to commit an offence when they know that it is unacceptable and wrong by the community’s standards, not to mention illegal. Helping offenders to develop solutions to problems legitimately is thus more valuable. Polaschek (2017, p. 68) finds that facilitating more pro-social support and problem-solving abilities will reduce the impulsivity and aggression that lead to offending. Through the everyday work within the sustainable program, Interviewee P1 had a chance to interact with pro-social groups, exchange ideas about life and learn to understand what behaviour is rewarded and what is condemned, as well as how to behave in a socially acceptable way in order to reach their work or life goals. These programs allow offenders to learn to adopt mainstream society’s cultural norms and values while working with outsiders who help run the programs. Changes in behaviour and attitude that are supported by the offender cooperating and interacting with community members allow offenders to ‘earn their way back into the trust of the community’ (Pranis 1996, quoted in Bazemore 1999, p. 4), an essential element in gaining reacceptance from society (Bazemore 1998; Maruna 2001) and facilitating their reintegration and desistance.

Building connections and interactions with community members can also be helpful with developing social benefits *c - respecting other people and living things* and *e - being altruistic*. Such interaction with society serves to communicate a set of values around reciprocity, respect and altruism with the offenders, who may not understand or have been exposed to these essential values of a society. Altruism can also be learned and fostered in many ways through a sustainable program and is closely related to respect. Recognising the intrinsic value of other people, of animals, of nature and of objects constitutes the essence of respect, which is seen by Walgrave (2008, p. 89) as the ‘minimum condition for making living together possible’ and thus leading to pluralism and multiculturalism. Interviewee P2, who developed a strong bond with the animals in his care while in prison, considered learning to care for animals to be an important step

towards acquiring respect. Reciprocally, he gained respect from both the animals and the program facilitators:

‘You surely had sentiments built with them [the animals he cared for] ... I had no pet before. When I first saw them, I didn’t expect to have much done with them [in terms of relationships and bonding] but just a way to spend my time inside [prison]. But weeks later, or days, they all became my best friends ... I knew how to interpret their movements. I petted them, fed them, helped to breed them, saved them from extinction ... I was told [by the facilitators] that we are all equal, no matter you are humans or animals. Animals also have the right to grow strong ... This [taking care of animals] is the best thing I’ve ever done in my life, not just in the prison.’ (Previous Program Participant, P2)

Wanting the best for animals and plants enables offenders to experience the ‘normal’ human lifecycle, which includes not only ‘taking from others’ but also ‘giving to others’. Hence, before showing respect to other humans, participants of sustainable programs first have to learn about respect for non-human living things. Fulfilling the needs of animals taught Interviewee P2 to be more patient and affectionate because he was informed by the facilitators that taking care of animals can be very intense such that carers must observe and learn to understand what the animals want and need. As Interviewee P2 recalled, even he was in a bad mood, he was still obliged to look after his animals and meet their needs. No longer just focused on self-interest, he needed to improve his emotion management and self-control in order to cope and live with negativity while still fulfilling his duties within the program.

From merely hoping to pass the time more quickly to genuinely striving for the best for his animals, Interviewee P2 demonstrated his great care and thoughtfulness in his work which led the stakeholders involved, particularly program facilitators and prison staff, to perceive him as pro-social and positive, concerned not only about his family and friends but also with the welfare of the vulnerable animals in his care. His routine activities within the program consolidated his role as a changing and functioning community member who had efficiently learned from other pro- social community members and been striving for social solidarity and desistance. This process reinforces one’s perception of altruism, which encompasses kindness and caring for others

(Peterson & Seligman 2004; Verdugo 2012), and supports that altruism cannot be learned through formal education alone (Toch 2000). Instead, it is acquired through interactions and communications with other people or non-human living things that facilitate a process of cognitive restructuring required to enhance one's social maturity and pro-social behaviour (Toch 2000). In looking after plants, animals and the environment in the context of community involvement, incarcerated participants learn how others usually treat plants and animals, which reflects the societal value of respect for the lives of all living things on the planet. This is a fundamental requirement of growing into and being accepted as a pro-social citizen and reinforces solidarity, which encourages individuals to align their self-interest with the common self-interests of the broader community through the development of sympathy and empathy for one another (Walgrave 2008, p. 89).

- *Social Benefit d. Contributing to the community / promoting the common good*

Altruism and solidarity encourage offenders to take active responsibility in contributing to the community and compensating for their past wrongdoings. In nations whose social and political systems are based on liberalism, such as the US, the UK and Australia (Pratt & Eriksson 2013), individual responsibility is central to this philosophy. It is also believed that offenders have to be punished in order to restore justice. However, these punishments tend to encourage only passive responsibility that does little or nothing to help victims or offenders in the long term (Anthony, Bartels & Hopkins 2015; Krasnostein 2014). In contrast, sustainable programs often involve participants taking active responsibility by serving the community, a process that the relevant stakeholders will perceive as 'just' as it embraces the expression of respect and the pursuance of solidarity for all (Walgrave 2008, p. 90). Interviewee O3, who was managing a recycling program alongside a TH program, found this to be an effective way for offenders to enact active responsibility, restore justice and gain the public's approval:

'There was a whole team of prisoners that we've employed on a daily basis to go and collect cardboard and aluminium soft drink cans, pack them up ... What used to happen was we arranged through some partnerships with trucks that were passing the prison regularly. The trucks would come so often, and they would load up all this cardboard and aluminium and take them into the city. The money

that was raised from that [selling the cardboard and aluminium] was donated to the children's hospitals, so prisoners are making direct reparation financially through the daily recycling.' (Ex-Prison Officer, O3)

Leading offenders to take active responsibility for their behaviour in turn urges them to be accountable and make up for their wrongdoing or offence by contributing to their community and their family, encouraging them to shift their thinking away from a focus on exploiting others to fulfil their own needs. In this regard, Interviewee O3's supplementary recycling program helps offenders who participate in his TH program to take active responsibility as a citizen, guiding them towards commonality and away from self-interest, which is unable to be brought by regimes only demanding passive responsibility from offenders (i.e. locking them up and throwing the keys away) which is mostly coercive and not constructive in solving any existing or future problems of offending. Yet, offenders taking active responsibility tend to comprehend more about commonality as accountability arises from within the individual.

Teaching participants to understand and value common self-interests via social learning with the community is a crucial step towards offenders developing a pro-social relationship with society and improving their social life overall (Walgrave 2008, p. 82). Interviewee O3's recycling program allows the community members (such as the truck driver and the recycling company that buys the cardboard and aluminium) to appreciate the achievements of offenders in the program, and the reparation for their wrongdoings, in transforming from irresponsible, selfish or immoral to pro-social beings. The program increases the exposure of the general public – who never normally engage with offenders or prisons – to the potential transformation that offenders can undergo, highlighting their contribution to the community and enabling them to regain responsible citizenship via expressing their willingness to promote the common good and to desist.

To promote such transformation more widely across the community, more outsiders ought to be exposed to the achievements of the participants of such programs while in prison. Otherwise, offenders' ability to engage with the community and become respected community members after release may be hindered by the fact that few people in the outside world will understand what they have gone through. Interviewee E1, who had studied and managed sustainable prison programs, suggested that more interaction

and involvement with the community and nature are necessary to promote offenders' altruism and contribution more widely within the community:

'They [the offenders] start to think a little less about themselves. This is an underpinning factor of transforming a person away from narcissism towards altruism ... The gardening program or animal program is a more holistic approach to rehab and reintegration as it seeks to involve [prison] residents in caring about other people, their local habitat, their community's needs, and other species ... and to involve communities to see them change. Not to isolate them but to integrate them with the people and other species in their communities, these programs help them to acknowledge that there is more to life than themselves and help to certify their effort in making that happen.' (Expert Interviewee, E1)

Interviewee E1 believed that participants can connect their work within the program with broader social responsibilities and benefits. He also asserted that participants could extend their concern and care for the vulnerable, from the animals in their care to other individuals or communities in need, if close connections could be made between the offender and these others. However, most prisons and their rehabilitation programs offer limited opportunities and services that enable offenders to integrate back into the community from which they have been alienated, often for some time (MacCready 2014). A sustainable program allows participants to connect with and help other people in need via collaborating with various community groups such as schools, NGOs and government agencies. For instance, the IGP in San Quentin State Prison, in collaboration with local organisations, provides the produce grown by offenders to communities whose fresh food is insufficient (MacCready 2014). Thus, their influence on the broader communities is no longer distant but direct, and their beneficiaries will therefore be more likely to develop positive perceptions of and relationships with the program participants, particularly when they meet in person. Giving offenders a chance to serve the community, especially in person, while imprisoned extends their contribution beyond the penal estate and builds up their connections with communities, while also ensuring that they develop their skills and the pro-social mentality needed to desist.

Interviewee E1 felt that the interests of the community are as important as one's self-interest, but that this does not mean that the offender must sacrifice their own interests

for the benefit of others. Everybody has the right to pursue their wants and needs in life. Walgrave (2008, p. 79) claims that human beings are ‘driven by self-interest. Rather than trying to repress this, we should accept it and include it in our social embedding’. Nonetheless, our choices in life are not completely without restriction. They are bound by social-ethical considerations and the fact that our behaviour impacts others in the community and vice versa, hence creating mutual responsibilities and entitlements. Taking others into consideration, common self-interest, which is described as ‘an ethical standard, to be learned through enculturation in upbringing, education, social relations and experiences’ (Walgrave 2008, p. 86), must then be weighed up against individual interests to promote a better quality of social life for all (Walgrave 2008, p. 80). The idea of common self-interest resonates with that of social sustainability, which, according to the Western Australian Council of Social Services, is based on the view that a quality society should support the interests of all people, and not jeopardise the interests of some for the benefit of others (Littig & Griessler 2005; McKenzie 2004). Therefore, offenders’ self-interests should never be fully compromised while teaching them altruism or respect; otherwise, this may create too much social and mental pressure, which can limit an offender’s desistance as they are suppressing their own needs.

- *Social Benefit g. Normalisation (for both offenders and the communities)*
- *Social Benefit h. Pursuing social justice*

Social benefits *g* and *h* have highlighted the significance of sustainable programs in preparing offenders and the broader community for the return of offenders. Diversity, connection and justice are important notions within social sustainability (McKenzie 2004). Justice should be fundamental to everyone. There are various concepts and types of justice, such as distributive, procedural, retributive, political, social, economic and criminal. Justice means different things to different people. It is more than rightness, impartiality and fairness (Schmidtz 2006) as it also resolves conflicts raised by everyday or social issues, such as freedom, opportunities and resources, through determining the entitlements that each individual should possess in different situations (Miller 2017). Although justice emphasises how each person should be treated, justice for groups and their benefits are also crucial. In addition to the fact that there are very scarce studies exploring justice for offenders, this thesis largely draws on social justice as its scope and

discussion are more likely to embrace all people of a society, including offenders, and consider justice for both individuals and groups. However, while fulfilling offenders' tangible and intangible needs can be an effective tool for preparing them for a desisting life, most penal cultures do not prioritise this in their treatment of prisoners. There are many issues that society has to address in order to achieve offender desistance. Offenders have to understand common self-interests and accept the norms and culture of the mainstream community in order to ensure their permanent desistance. On the other hand, the community needs to appreciate offenders' needs and roles as citizens and to prepare for and accept the return of transformed offenders to allow ex-prisoners to develop a genuinely pro-social relationship with the community (Meisenhelder 1982), or their desistance will be unlikely.

Nevertheless, most of the general public knows little or nothing about the factors behind successful desistance and reintegration; more than simply giving ex-prisoners a job, their existence and needs as a returning citizen must be normalised before they are released (Turner 2007). In this regard, interviewees O3 and E4 pointed out several important aspects related to normalising the return of offenders about which the general public might not be aware:

'People don't know the obstacle can be much greater than employment ... the adjustment, the transition that shocked him [a released offender] was the noise, the colour, the crowds. When he first came out, he struggled with going to shopping mall because of the noise and there is so much colour of people and the clothes, he's only seen for years green, blue, because prison officers in blue and prisoners in green. He couldn't adapt [to the outside world].' (Ex-Prison Officer, O3)

'Most problems noted over the years are about relating to others and specific relationship with and among family. Loss is a very big thing in prison and its impact is not widely recognised. They [the released offenders] and their family don't know what to do with each other.' (Expert Interviewee, E4)

Interviewees O3 and E4 explained that normalisation is not only about observing offenders return and then requiring them to seek employment, while the undesirable

labels remain and the issues around adaptation go unaddressed. There are many norms or normal things that have become foreign for released prisoners; for example, they may have lost the ability to cook, buy groceries, live with their family and deal with crowds due to their institutionalisation. Interviewee O3 claimed that a colourful and noisy world could become abnormal to the released, and seeing families every day might be weird for them too. These factors may minimise offenders' successful reintegration or desistance as their pro-social attitudes may be hindered from development and their anti-social behaviour, such as withdrawal, may then re-emerge.

Interviewees O3 and E2 thus emphasised the need for engaging community work through sustainable programs in order to promote the normalisation of reintegrating offenders and allow them to develop closer relationships with community members:

'Some sort of programs should be made mandatory to offenders to normalise the outside living, like the garden program because it is able to gather people from the outside to teach them [the offenders] how to grow, how to work things out, how to live, how to care.' (Ex- Prison Officer, O3)

'People are generally sceptical to offenders. The program is better to be community-based, not just inside prisons. It's easier for them to apply what they have learned, make the applications more needed. You're in the real world and so you've got an opportunity to apply that. When you are in prison you don't have the same opportunity to apply what you have learned. It's very restrictive in that.' (Expert Interviewee, E2)

Thus, these interviewees argued that engagement with communities should happen not only in prisons, but also make provisions for offenders to work with the community outside of the prison walls. This will provide offenders with more realistic expectations of the reintegration process and allow them to learn about managing the foreseen difficulties in their desistance journey. Community members who know little about imprisonment or reintegration can then discover more about the meaning and requirements of offender transformation and desistance, hence normalising offender returns. Mutual understanding and solidarity, which are essential to social sustainability and desistance, are therefore more likely to be established among both parties.

Thorough understanding of the difficulties faced by offenders during reintegration not only facilitates normalisation among offenders and communities but also leads to discussion about the social justice. As discussed in Section 2.2, social justice should not be a privilege for non-offenders alone, but should be available to everyone, including offenders. Ensuring people to have access to social services and resources as well as justice, and protecting the disadvantaged and vulnerable groups, is a joint responsibility between governments and all individuals of a society (The National Pro Bono Resource Centre 2011). Quite often, the system and society overlook the reciprocity of ‘just’ when dealing with deviance. Reiman (1989, p. 124) argues that society’s handling of individuals who are identified as risky is based on a unidirectional account of rights and responsibilities: these individuals owe obligations to the community. However, Reiman suggests that fellow community members also owe obligations to those ‘risky’ individuals and that this responsibility should not be denied. Communities are also obliged to actively explore ways to help offenders address their issues (Waitkus 2004) so as to pursue common self-interests and social justice.

All the interviewees in this research agreed that the public is generally ignorant of many of the issues related to and factors shaping crime, offenders, and the justice system. They all believed that the public needs more education, information and time to understand offenders and their circumstances. Certainly, this cannot be achieved by citizens on their own. Fifteen of the seventeen interviewees claimed that the government and media ought to provide society with honest and accurate information, rather than promoting hostility towards or stereotypes about offenders and their families, in order to build a more harmonious and sustainable society. Interviewee O2 stressed that many offenders would not return to drugs, alcohol or crime if they could receive sufficient support and acceptance from the community. Therefore, more sustainable programs that foster offender – community cooperation and interactions are crucial for deepening the appreciation of offenders’ lives, including the underlying causes of their offence and what is needed to support their desistance.

All the interviewed program participants also agreed that community involvement is critically important for their journey to desistance. One the previous participants argued

that:

‘[i]f you let the community show up [in an animal program], they will bring their kids because they can learn ... I do public speaking to people [in the community and in the prison]. That’s the story I own to help. All my story is now public knowledge.’ (Previous Program Participant, P2)

Interviewee P2’s situation reflects the potential of integrating offenders into the community. Not only did his family get the chance to observe his work at the animal program, but other offenders and community members were also able to learn of his abilities and determination to live a better life through visits and his public speaking. In this way sustainable programs offer participants the opportunity to communicate their intentions, needs and pro-social changes to the broader community, both inside and outside the prison. Interviewee P2 believed that the prison and their partnered NGOs have a determinant role in assisting such communication. Achieving social justice requires equality and understanding of mutual needs and responsibilities of all community members (Baldry 2010), but it is important to note that the responsibility to oneself and to the community are both different yet necessary. Society also bears a responsibility to help people in need, even offenders, in order to create a fair society for all. The notion of social justice does not only relate to economic equality such as fair trade, but also concerns equal opportunities in the community, including impartiality among different genders and ethnicities, or equal access to education. Pursuing social justice is seen as ‘ensuring systemic and structural social arrangements to improve equality, as a core political and social value’, signifying the importance of ‘finding the optimum balance between our joint responsibilities as a society and our responsibilities as individuals to contribute to a just society’ (Baldry 2010, quoted in The National Pro Bono Resource Centre 2011, p. 2). Social justice cannot be achieved if offenders’ changes and needs are not communicated to the public, just as society’s social values and standards are communicated to offenders, as this hinders social sensitivity and therefore the capacity for social justice to be spread across society. Offenders are also a part of their communities and most will return to these communities one day. When the wellbeing and needs of offenders cannot be secured, it is difficult for them to develop a sense of belonging to their community to help them stay on the path to desistance or pursue social

solidarity, public safety and welfare. Therefore, understanding the needs of all community members, including offenders, alongside recognition of offenders' transformation and achievements are the crucial elements to help maintain social sustainability and to ensure that society's responsibilities around sustaining social sensitivity, justice and offender desistance are fulfilled.

Seeking social coherence, which can be fostered through involvement in social networking and volunteering as well as establishing solidarity and tolerance towards minority groups, is also a significant indicator of social justice (Littig & Griebler 2005). This aligns with the key perspectives underpinning social sustainability, which argue that people's wellbeing, needs and sense of community should be secured (Palich & Edmonds 2013). However, in this regard, offenders have a broad range of needs even among the same type of offenders: the causes of their offences and their needs can be different from one another. 'Making everyone have exactly the same would not be just' (Hudson 2003, p. 99). Offering the same kind of assistance to all offenders is ineffective for their desistance or for promoting social justice, as they have all faced unique situations that led them to offend. Their specific needs have to be addressed before long-term desistance can occur. Interviewee E6 cited the example of the particular needs of Indigenous offenders, which are not widely recognised by the public, to highlight the lack of public understanding of offenders' needs:

'A lot of the prisoners that we have in Australia are Aboriginal prisoners ... Maths and English skills aren't very valuable when they get back to their remote communities. It doesn't matter so much so we give them skills like sustainability and horticultural. We teach them how to grow things with their hands, how to build water filters and things like that. These skills are valuable once they go back to the communities. We teach them to recognise plants, we teach them Aboriginal medicine, things like that, so they are not only useful but valuable to the community. If they are valuable to their community, they are less likely to commit crimes again and go back to old habits.' (Expert Interviewee, E6)

Interviewee E6's experiences have taught her that it is possible to foster social justice in prison via participation in sustainable programs, particularly TH programs for Indigenous

offenders, since these programs are more socio-culturally sensitive. While many people may realise the importance of getting released offenders employment, the need to ensure that the particular job suits the offenders' circumstances and culture may not be well articulated in the context of consolidating desistance. If this problem is not addressed properly, offenders may be unable to use the skills attained in prison to find the same kind of job in their communities. Indigenous offenders, who are overrepresented in Australian prisons, are typical of ex-prisoners facing this obstacle. Their connection with the land is much stronger than that of non-Indigenous people and they maintain a close connection to nature in their daily lives (Jones 2014). Therefore, nature-related jobs could be more suitable for Indigenous offenders than other industries, like construction that are more often chosen by their non-Indigenous counterparts, as such industry is relatively more related and culturally sensitive to Indigenous cultures. With the trainings and experiences obtained in the sustainable programs, the chances for Indigenous offenders to enter nature-related employment can be increased. Meeting offenders' underlying needs in relation to maintaining a path to desistance through awareness of their unique socio-cultural characteristics is therefore vital for promoting social justice within our communities, which will further enhance social sensitivity among all community members. Sustainable programs can diminish the social distance between Indigenous and non-Indigenous offenders, staff and/or program facilitators by increasing social sensitivity towards minorities in prison and strengthening the pro-social relationships among different ethnic groups.

7.5 Maturation

The findings reveal no social benefits that directly affect the development of maturation or other unexpected events that may lead to desistance. Desistance may happen without any deliberate planning. For example, when offenders become involved in a positive relationship, they may unconsciously desist (Laub & Sampson 2003, p. 278). Marriage and employment are the two most prevalent turning points that foster desistance unconditionally. Further, many people desist naturally in their teenage years or early 20s (Polaschek 2017) when they start to mature. Kohlberg (1976, pp.376) argues that our moral development is a gradual process that begins in childhood, when we are inherently selfish and focused on fulfilling our own needs. This focus on self-interest ideally ceases at adulthood as adults learn about universal ethical principles and develop autonomous

moral judgements (Walgrave 2008, p. 86). However, in reality, not all people become moral beings. Moral development relies on social learning, education and maturity to override our selfishness, but it is nearly impossible to identify a single factor that leads to maturation or the exact time when maturation has an effect on an individual. Maturation is an enduring and essential process for desistance but this research finds no significant evidence linking it to social sustainability.

Only one interviewee mentioned maturation. Interviewee P4 believed that he had learned to view things from different perspectives because he matured through working and talking with people in prison and from the community. The jobs he performed in the animal program gave him a new role that he had never owned and with it a greater sense of responsibility. He could think ahead and discuss challenges with those around him, rather than getting held up by obstacles. Some people withdraw from offending without joining any intensive rehabilitation program during incarceration, simply as a result of life-changing incidents such as imprisonment. However, others, like Interviewee P4, go through a process of maturation and desist because of their transformed identity and supportive pro-social relationships.

Although maturation is deemed to be omnipresent in the process of desistance, the interview findings in this thesis and the current literature reveal limited information about this key factor of desistance. More research therefore needs to be done that explores this notion in order to examine how community involvement can enhance offenders' maturity, especially among juveniles and young adults.

7.6 Auxiliary Social Benefits influencing Desistance

There is one social benefit found to be less impactful in facilitating desistance in prison: *reduced recidivism*. The discussion below details the reasons for the limited influence of this factor on offender desistance.

- *Social Benefit f. Reduced recidivism*

Reducing recidivism can be the most direct benefit to the community of prison programs as it is the primary goal of most such programs. Sustainable programs have been reported to yield much lower recidivism rates than ordinary rehabilitation programs on many occasions. For example, the recidivism rate recorded in the GreenHouse Program at

Rikers Island jail was found to be 40 per cent lower than that of the state and national averages in the US (Jiler 2009). The Insight Garden Program in San Quentin State Prison surveyed 117 graduates of the program and reported a recidivism rate of just 10 per cent, compared with an average rate of 70 per cent for the whole state in 2011 (Insight Garden Program 2019). Participants within the Lettuce Grow program organised by Growing Gardens in Oregon had a recidivism rate of only 8 per cent, in contrast to the state average of around 30 per cent and the national average of over 50 per cent for the same period (Growing Gardens 2017). Project Pooch, in which juvenile offenders care for abandoned or abused dogs, obtained a recidivism rate of zero (Merriam-Arduini 2000). Other research also supports that engagement in sustainable programs can lead to reduced recidivism rates among most graduates of these programs (see examples Cammack, Waliczek & Zajicek 2001; Holmes 2017). This proves to the public that offenders can be transformed from deviants into responsible citizens when the appropriate and effective method is applied in prison.

Although there are discrepancies in the methods used to measure recidivism rates in different prisons, states and countries, a decreasing recidivism rate is still seen as the most persuasive determinant of public support for sustainable programs because the issues around how best to measure recidivism are not a major concern for the general public but are largely confined to academic debate. The recidivism rates are the most obvious outcomes that the public can actually 'see'. A significant reduction in recidivism could mean that the program graduates are demonstrating to the world their determination to reflect on their previous misconduct and to transform themselves by taking part in sustainable and meaningful work in prison. This will be seen by those community members who get directly involved in these programs and perhaps also by the general public if the improvement in recidivism is communicated effectively to the community by governments or prisons. The public will be able to witness the offender's change from criminal to citizen and their efforts towards regaining citizenship, while also recognising what prison programs or initiatives are actually effective.

Nonetheless, little previous research has conducted systematic surveys in this regard. In most cases, only the most well-known programs have reported on recidivism rates. Not even many interviewees in the present study mentioned recidivism rates as most had no

access to such data or statistics on recidivism, and/or found the rate difficult to measure or compare. Generally, the interviewees believed that sustainable programs do help to lower recidivism, according to overseas research or their own observations, but they had found no solid evidence of this in Australia. Only Interviewee O5 expressed his thoughts on this issue in some detail: he believed that it is particularly challenging to conduct systematic research on recidivism rates among sustainable program participants in Australia because there are not many such programs operating in Australian prisons and that the government, media and public are sceptical about the value of these programs. Additionally, the evidence supporting the wider use of sustainable programs can be undermined by those who have not been exposed to such data and hence do not recognise the value of offenders' achievements through sustainable programs. The accessibility of data is highly dependent on the decisions or disposition of prisons and/or governments. Thus, there are many circumstances obstructing the public from accessing recidivism data. Long-term desistance may then be adversely affected since the public recognition required to support desistance is absent or cannot be successfully transmitted to the offenders.

Furthermore, simply contrasting recidivism rates is inadequate for explaining the causal relationship between participation in sustainable programs and desistance. It is unable to reveal which or whether any parts of the programs are driving positive results or effectiveness. Therefore, ironically, social benefit *f*, although a significant indicator of the effectiveness of TH programs and animal programs to the public, is also one of the most imprecise factors determining the impact of a prison program on desistance.

Conclusion

Like all other citizens, offenders have their own problems and needs that must be resolved in order to achieve a pro-social life. Those who encounter social problems such as being incapable of coping in the community, lacking opportunities, being unable to access community resources or lacking social support tend to get involved in trouble, deviance or crime. Simply removing these people from society has a limited effect on helping them solve their problems (Hudson 2003) and may indeed further aggravate their problems through the labelling process and the negative effects of incarceration and institutionalisation.

Table 7.1 summarised the effects of each social benefit on desistance. It shows that there are multiple ways in which TH programs and animal programs can help an offender to desist rather than aggravating the negative impacts of imprisonment. Although two key factors of desistance, Negative Feelings about the Past and Maturation, are less likely to be cultivated through the development of social sustainability, the social benefits explored in this chapter can compensate for some of the inadequacies of the personal benefits discussed in Chapter 5, especially fostering Strong Pro-Social relationships with Society. Based on the analysis, sustainable programs that collaborate with local groups, organisations and employers enable offenders to engage in pro- social interaction and networking with others outside the pool of penal stakeholders. Offenders are thus exposed to effective pro-social interactions through which they learn about social values and norms as well as developing strong bonds with other community members. This way of facilitating desistance and reintegration also allows community members to recognise the capabilities of the released offenders and their struggles to desist, and to assist in achieving social justice by offering opportunities to the right candidates. While some of the social benefits overlap with the personal benefits outlined in Chapter 6 (i.e. *being altruistic* and *respecting other people and living things*), the social benefits allow offenders to transform with the assistance and support of their communities rather than going through this process of change alone, with only their animals or plants to keep them company. Moreover, offenders' contribution to the common good are more obvious and direct to society through these programs, arousing their sense of social responsibility and improving their relationships with other community members. Sustainable programs serve the purposes of better fulfilling offenders' (social) needs and sustaining their desistance lifestyles, lessening their risk of returning to offending, and creating a society with greater fairness and solidarity. Nonetheless, it seems that reducing recidivism is not seen to be significant or effective in helping offenders to desist because the communication of the extraordinarily low recidivism rate among graduates of sustainable programs is either non-existent or not widely circulated in the community.

Reinforcing social sustainability or promoting desistance should never be the sole responsibility of offenders. They are not the only party that needs to change; their communities are also obliged to change and comprehend the needs of offenders in order to build an equal and safe society. It is of utmost importance to develop programs that

recognise the importance of social sustainability, such that the connection between, on the one hand, social relationships, communities, social values and justice and, on the other, offender desistance or reintegration is taken into account. Offenders have to learn to consider community interests before acting purely on self-interest. Meanwhile, communities need to reject the labelling and stigmatising view of offending in order to understand what is needed to keep offenders away from crime and to value their contributions and changes. Only transforming offenders' behaviour and minds, or promoting personal sustainability alone, will most likely not lead to a reduction in recidivism. Desistance requires cooperation and mutual understanding rather than alienation and stigmatisation. Therefore, sustainable programs that embrace greater community engagement are necessary to enable offenders to conform with society's norms, ensuring that incarceration and institutionalisation do not impede their motivation to desist.

Chapter 8 Environmental Sustainability and Economic Sustainability

The previous two chapters have introduced the importance of offenders developing personal and social sustainability while in prison to support their pathway towards desistance. This chapter explores the two other aspects of sustainability – environmental and economic – which were the two least discussed topics among the interviewees. It appears that the knowledge and experience of the interviewees were focused more on the personal and social growth of offenders. However, the testimonies of those interviewees who did reflect at some length on environmental and economic sustainability in relation to TH and animal programs suggested that they may not be as influential as personal and social development, but can still positively and uniquely impact desistance.

The sections below will first discuss environmental sustainability and then economic sustainability. Each type of sustainability will be linked to the five key factors influencing desistance (Positive Feelings about Self and Future, Negative Feelings about the Past, De-labelling and Recognition by Significant or Respected Others, Strong Pro-Social relationships with Society, and Maturation), as was done in the previous two chapters, in order to examine the merits and drawbacks of these two often overlooked benefits in facilitating desistance.

8.1 Environmental Sustainability

Environmental sustainability embraces concepts such as reducing carbon footprints and the use of resources, recycling waste, and preserving plants and animals (Schenkel 2010). Offenders who participate in these conventional environmentally friendly activities can contribute to saving the natural environment and foster environmental sustainability. While these traditional applications are typical among discussions of environmental sustainability, this thesis expands the discussion of environmental sustainability to include the social environment because a sustainable social environment is also a vital factor that affects offenders' desistance journey, according to the interviewees. Most discussions of environmental sustainability solely relate to conservation and protection of the natural environment. Yet, offenders are not only affected by or affect the natural environment; the social environment can also impact offenders' lives, thoughts and

behaviour.

Cultivating a more humanised social environment is as significant as protecting the natural environment through a sustainable program in terms of securing environmental sustainability in prison. This extension of the notion of environmental sustainability to include the social environment is an original and innovative contribution of this thesis to the scholarship on sustainability more broadly, and with regard to desistance more specifically.

As stated in Chapter 6, offenders have little, if any, autonomy over their incarcerated lives and environments. Most prison environments tend to be so rigid and constrained that offenders' self-identity may be diluted by their institutionalisation (Goffman 1961). Many prisons possess insufficient environmental stimuli that can encourage social interaction and recognition (Lynn 1993; Kurki & Morris 2001) or reduce aggression and violence (Atlas 1984). In the absence of environmental stimuli, there will be a higher possibility of serious mental distress and other negative consequences after release (Wildeman & Andersen 2020). If offenders are exposed to no intellectual or environmental stimuli during imprisonment and are incarcerated for more than a year, mainly within their cell, they will be more likely to suffer from psychological and social dysfunctions (Atlas 1984; Evans & Morgan 1998, p. 251). With negative impacts such as degradation and dehumanisation, it is extremely challenging for an offender to construct a new and pro-social identity when they are not being seen as 'normal' or 'worthy' humans (Maruna, Wilson & Curran 2006), impeding the development of their desistance.

TH programs and animal programs offer a much more stimulating, engaging and positive natural and social environment in prison, which might help mitigate the negative impacts of institutionalisation and encourage desistance. Table 8.1 summarises the connection between environmental benefits and the key factors of desistance. The sections below will then explore in more detail whether and how these four environmental benefits can promote desistance.

Table 8.1 Linking Environmental Benefits to the Five Key Factors influencing Desistance

Key Factors of Desistance	Environmental Benefits
Positive Feelings about Self and Future	b. Conserving special / endangered plants / animals
Negative Feelings about the Past	-
De-labelling and Recognition by Significant or Respected Others	b. Conserving special / endangered plants / animals
Strong Pro-Social relationships with Society	c. Building a safer/ more relaxing / calming / humanising prison environment for offenders and staff / increasing morale between offenders and staff
Maturation	d. Improved understanding of / reduced harm to the environment
Auxiliary Environmental Benefits influencing Desistance (Do Not Directly Contribute to Desistance)	a. Greening up the prison

8.1.1 Positive Feelings about Self and Future

- *Environmental Benefit b. Conserving special / endangered plants / animals*

One of the greatest benefits of conserving animals and plants is that offenders can boost their self- esteem and employability prospects by devoting and committing themselves to sustainable programs. Positive feelings can be cultivated towards themselves through their success in protecting animals and plants and the resultant process of de-labelling and recognition by others (see Section 8.1.3). Interviewee P2 described his sense of

success and improved self-esteem as a result from his participation in an animal program:

‘The [animal] program taught you how to be a human being. In the program I can take pictures and let them [my daughters] know what daddy is doing: I’m in education, rearing animals, saving lives, not hanging up with gangsters anymore. My time was more valuable. The staff [of the program from a local organisation] thought I was doing great and gave me references for job seeking ... I also learned that if people don’t want to deal with me that’s fine too. That changed my whole thought process ... My daughters are so happy for me and proud of me.’ (Previous Program Participant, P2)

The changes arising from his participation in the animal program led this participant to gain respect from the program facilitators and his family, thus generating more positive prospects for his future. Through this recognition, he proved to himself that he could be more capable than he had previously imagined. He was able to save animals’ lives as well as his own life. His experiences in prison thus furnished him with ability and hope for the future. He now shares his desistance journey with the broader community through public lecturing or blogs in order to help people better understand the positive sides of offenders and their desistance paths. If an individual cannot gain any personal benefits from the environmental benefits or their pro-environmental behaviour, they will be unlikely to develop a genuine pro-environment attitude (Corral-Verdugo 2012) since such behaviour alone does not imply any psychological or cognitive changes. Interviewee P2’s story demonstrates that self-esteem can be increased through pro-environmental work in which satisfaction, pride and other positive feelings about oneself and the future can be achieved via devotion to one’s duties, which in turn support a desisting lifestyle.

8.1.2 Negative Feelings about the Past

The United Nations Commission on Environment and Development adopted Brundtland’s (1987) definition of ‘sustainable development’, referring it as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’ (known as the Brundtland definition). This implies that human development has to comply with environmental conservation such that both the present and the future are attended. While individuals’ current needs are important, the needs of

future generations must also be addressed. However, the ‘past’ is less likely to be emphasised in the conventional definition of environmental sustainability.

From all the interviewees’ perspectives, environmental benefits are unlikely to lead offenders to reflect on their past because fostering environmental sustainability is more forward-looking. From Chapters 5 and 6, it was evidenced that through daily work in the programs, offenders develop a greater concern for the welfare of animals, plants and their community. They are then more likely to realise that their own gain should not be their sole focus and that they need to shift their focus from themselves to other things and other people in order to sustain the lives and wellbeing of others. This process is primarily forward-thinking; for example, it is focused on preventing the extinction of certain animals or plants, increasing the availability of vegetables for consumption and saving animals from euthanasia. If the focus is on the outcomes of environmental protection, the rearing of animals and plants, or the contribution to the community, the opportunity to rethink the past can be undermined.

8.1.3 De-labelling and Recognition by Significant or Respected Others

- *Environmental Benefit b. Conserving special / endangered plants / animals in prison*

As discussed in Section 7.3, saving animals and plants through participation in sustainable programs tends to help participating offenders to contribute to the community and promote the common good in various ways, hence improving the public image of offending and facilitating the recognition of their efforts and contribution. *Social benefit d. contributing to the communities / promoting the common good* is enabled by the direct engagement and interaction of participating offenders and general community members, including both those visiting or working in the prison and those outside the prison (see Section 7.3). Differing from *social benefit d*, *environmental benefit b* does not necessarily yield community recognition because the number of sustainable programs that allow offenders to directly communicate with or contribute to their local communities is scarce, as indicated by the existing literature and the interviewees in this thesis. In this context, the de-labelling effect may only come from offenders’ family or staff involved.

As quoted in Section 8.1.1, Interviewee P2 was delighted to share that his changed

behaviour and thinking were recognised by his significant others. Participating in the program has taught him to learn about humanity, think for others and better himself. However, his story also sadly revealed that the recognition he gained was mainly restricted to his family members and the staff involved in the program's operation. He never spoke of any changed relationships with or appreciation received from any other community members, even though he was effectively contributing to the broader community by caring for endangered species. Interviewees O1, O2 and O3 also mentioned that, although offenders would also grow food for prison consumption, this contribution was not gaining as much appreciation as that for serving vegetables to the outside community. Interviewee O3 claimed that in his TH program the vegetable shop owners would sometimes travel to the prison, collect the vegetables grown by offenders and then sell them in their own shops or distribute them to people in need in collaboration with charities. Yet there was no guarantee that the food recipients or buyers would realise the efforts of offenders because the prison had no control over the communication of such information by these third parties. In other words, the offenders would understand that they were doing good for society, yet the primary beneficiaries might not, minimising the likelihood of de-labelling or recognition of offenders' contributions.

Some sustainable programs allow incarcerated participants to grow their own food in which some of the food will be consumed by themselves and staff while some will be sent to different organisations in the community such as hospitals, schools and charities. For instance, the Garden Project at the San Francisco County Jail will donate food to local food banks who look after elders and families in need, dogs are trained to serve as service dogs, and local zoos can benefit from offenders' efforts around conserving endangered species (MacCready 2014). This work thus involves altruism and contribution to the broader community enabled by the care and preservation of plants and animals, and it is more likely that the recipients will learn that their products and services have been provided by incarcerated offenders, leading to greater recognition and de-labelling by significant and respected community members.

According to both the literature and the interviewees' testimonies outlined in this thesis, not many sustainable programs provide much opportunity for offenders to contribute to their local communities, regardless of their desire to make good to society. Therefore, the

altruism and contributions of offenders tend to be seen only by their families, prison staff or community members who work in the prison. This is still conducive to offender desistance because these are respected and significant others who appreciate their changes and new identities, yet the macro level of recognition by local communities will likely remain absent or limited because they have no channel to express their appreciation or never realise the contributions made by the offenders, therefore hindering offender desistance. Effective desistance requires significant community acceptance; and paying back or contributing to the community through sustainable means can help to achieve this goal. Ensuring that offenders' meaningful, pro-social changes are promoted among and acknowledged by the primary beneficiaries of the community and other respected members can enhance the positive influence of de-labelling by the community.

8.1.4 Strong Pro-Social relationships with Society

- *Environmental Benefit c. Building a safer/ more relaxing / calming / humanising prison environment for offenders and staff/ increasing morale between offenders and staff*

Prisons tend to be concrete and rigid in design and operations (Moran & Turner 2019). Once a person is imprisoned, they will lose control in most if not all areas of their life and have no autonomy in shaping their surroundings, such as being able to decorate their cells with plants or interacting with anyone other than their cellmates. Nevertheless, as evidenced in Chapter 6, autonomy is an important element to help an offender transform and desist; and the deprivation of autonomy in one's life may lead to negative emotions like frustration and depression, which can hinder prison safety and desistance. Sustainable programs unconventionally allow their participants to establish, change and improve their prison environment by growing plants around the facility, livening up the prison with animals, and facilitating pro-social relationships, in particular among offenders and prison staff. The programs also offer a more peaceful and collaborative environment to the participating offenders, who are then able to work in a calmer and more relaxed way (see Furst 2006; Harkrader, Burke & Owen 2004; Sandel 2004).

Interviewee O1 was one of the only interviewees who actively talked about the influence of a less rigid prison environment on prison security:

‘I think it’s [the prison’s] something overwhelming by concrete jungles, walls are concrete, [with] razor wires, fences ... And it’s designed to make you feel trapped ... I think the program [helps/lets the participants] build up a different environment by inclusion of plants and some gardens and bit of green, and a connection with the Earth, especially for the Aboriginal people, a connection with a sense of beauty ... By creating an environment like this, you get a softer environment and softer prisoner. Prisoners don’t feel so caged. They don’t have to fight. There’s nothing they need to fight for [in the gardens], especially for space. They get what they need [for the program] and don’t get stuck indoor in one position. They walk under sunshine, water plants, take care of seedlings and crops etc. ... like a typical farmer.’ (Ex-Prison Officer, O1)

Interviewee O1 believed that the TH program in which he was involved had created a less concrete, more humanising prison environment by the inclusion of more plants in the prison. Unlike traditional prisons, which resemble a concrete jungle, his TH program established a refreshing and relaxing space within the prison. The working atmosphere was also more cooperative rather than competitive. Such a program and environment allow offenders to work together to nurture the best crops and to have a greater chance of mobility and fewer occasions for conflict, as one of the biggest issues in prison – overcrowding – is temporarily resolved in the program, thus allowing offenders to regain a tiny sense of control over their lives.

Furthermore, there will be more opportunities for participating offenders to build a more harmonious environment and healthy pro-social relationships with program staff and visitors if the program and the garden are open to more inside and outside parties. Based on his years of observation and experience in the penal industry, Interviewee O1 expanded on his views in this regard:

‘[b]eing in the garden, they can talk about their feelings, more than they can in a cage. They don’t talk about how bad the guards are, how their life is ruined, all those bad things. They have something new and cool to chat about, become less ‘guarded’ to guards or to us [those responsible for the program] ... We talk more [often] about the programs, the plants, the problems, the solutions etc. etc. It’s

just like talking to a friend or neighbour. They can also invite the family and go and sit on the grass. I think it's less frightening for the children to come to visit. Just a lot more welcoming environment for the outside to come in and the more people that come into the prison, the more normal it is for them [the prisoners] to see other people, the more just that they gonna be when they get out [due to fair treatment they might receive from community members]. If they only see the same faces all the time and the same barbarian, when they get out, they won't know what to do, they will just get back to the behaviour that they know.' (Ex-Prison Officer, O1)

Interviewee O1 argued that the TH program in his prison offered an environment that is more satisfying, friendlier and less overwhelming to offenders and staff because the discussions raised between the two sides tend to be less tense. As there are strict rules limiting the content of information that can be shared among offenders and staff, both parties will have only a few topics about which they can chat. He observed that because the program was relatively new and innovative, staff members and visitors were interested in seeking more information from the offenders. In place of prisoners merely moaning and complaining about prison life, sustainable programs generate more lively and meaningful conversations, particularly among offenders and staff. This ensures a safer working environment not only for participating offenders but also for staff members, facilitators and volunteers within the programs. Negative emotions and behaviour, such as aggression, altercations and other behavioural issues, are then less tempting as offenders can find greater satisfaction and humanised treatment through these programs, encouraging them and staff to be more courteous (Graham 2000, p. 250). The normalised interactions may relieve the stress felt by those working in or visiting a prison, improving the social environment and lessening the likelihood of unfavourable relationships developing out of the stress and agitation common to prison life. Strong pro-social relationships and thoughts are therefore more likely to be cultivated among offenders and other community members, thereby encouraging desistance.

8.1.5 Maturation

- *Environmental Benefit d. Improved understanding of / reduced harm to the environment*

As stated in Chapter 2, maturation is different from aging such that maturity has to be demonstrated by ways of thinking and behaving. Through working day to day with plants and animals, sustainable program participants acquire the ability to understand the needs of other species and to adapt to the changing conditions and challenges that emerge while looking after these species and thereby becoming a more mature individual. This process involves the growth of spontaneous empathy and altruism, as offenders learn the importance of protecting the natural environment and other species through their everyday work. These changes then guide them to a more mature stage. Interviewee P1's story reveals how he underwent such a process:

'they [the prison staff] chose me and I don't know why. They thought it [the program] was a good fit [to me] because I was doing anti-gang prevention [program]. Then I tried and I found I really liked it ... looking after turtles, bees, frogs etc. They were so tiny and fragile ... I took classes of sustainability [with certifications]. I was so into this kind of work, then I proposed another program and it got signed off. It is an awareness group program about sustainability ... We came together to discuss and kicked away bad ideas.' (Previous Program Participant, P1)

Offenders tend to develop an environmental consciousness while being caregivers for plants and animals (MacCready 2014). Interviewee P1 expected nothing from the program but it ended up changing his life completely. He naturally grew to be pro-environment through his working and learning process. His efforts around conserving and treasuring other species demonstrated that he had steered away from self-centredness and began to consider animal welfare and the environment; thus he went through a process of maturation and a change of identity from someone who only cared about himself to an environmentalist. He hoped to contribute more than he could through the prison program, so he enrolled in a new wastewater management program to learn how to recycle wastewater and earn a certification before release. He became more concerned about the people, species and ecosystem around him, consolidating his determination to

reduce harm to the environment. Such growth of pro-environmental attitude and behaviour reinforces that sustainable programs can facilitate maturation and desistance without any initial interest in sustainability on the part of offenders (see more in Chapter 9 about the voluntariness of participation).

Moreover, Interviewee O5, who worked closely with TH program participants, said that some of them would even establish rules in their cells with their cellmates to avoid energy wastage:

‘I saw them put sticking notes around light switches to remind others to turn off lights they don’t need. Those who breach the rules need to give out some food or cigarette or do all the housework for others.’ (Ex-Prison Officer, O5)

Sustainable program participants in this scenario appear to extend their harm reduction and pro- environmental behaviour and attitudes from the workplace to their cells, reflecting their shift towards more pro-social behaviour (Bamberg & Möser 2007; Gallagher 2013; Hines, Hungerford & Tomera 1987). Bamberg and Möser (2007, p. 15) contend that pro-environmental behaviour is

‘a mixture of self-interest (e.g., to pursue a strategy that minimises one’s own health risk) and of concern for other people, the next generation, other species, or whole ecosystems (e.g., preventing air pollution that may cause risks for others’ health and/or the global climate).’

The Norm-Activation Model (Schwartz 1977) is often adopted to explain such correlation between self-interest and pro-social activities. This model illustrates that pro-social behaviour is determined by moral or personal norms that are defined by Schwartz as an individual’s perception of an intense moral obligation to engage in pro-social activities. In other words, people become altruistic or not depending on the impact of moral norms on them, which influence their cognitive structuration of their own norms and values. Therefore, to bolster pro-social attitudes or behaviour, offenders’ sense of moral obligation must be aroused. To develop and initiate pro-social norms, there is a need to understand and appreciate environmental issues as a cognitive prerequisite to the development of pro-environmental behaviour (Bamberg & Möser 2007). If offenders

genuinely comprehend the needs and importance of protecting the environment, this will lead to long-term pro-environmental behaviour, helping the individual to develop pro-social behaviour and norms. The reciprocal effects among cognitive, emotional and social factors are argued to contribute to the establishment and application of moral norms (Bierhoff 2002), and to further pro-social and pro-environment behaviour. Thus, moral norms can explain pro-environmental behaviour such as energy saving and recycling (Black, Stern & Elworth 1985; Guagnano, Stern & Dietz 1995).

In prison, the tasks assigned within TH programs and animal programs can lead offenders to see and experience the need to protect and care for nature, plants and animals. They learn to consider this as a moral norm that they are obliged to adopt. When their achievement draws positive feedback and recognition from other people, or even themselves, this helps to consolidate their altruistic pro-environment and pro-social behaviour. In such process, virtues like being altruistic or learning to save energy are not deliberately developed. These positive changes naturally emerge as offenders come to understand more about the environment and become more mature through their engagement with the program, without coercion, reflecting a natural process of maturation and of embracing desistance unconditionally. Yet these pro-social changes often only happen internally, and are therefore less effective in creating Strong Pro-Social Relationships with Society, even though the important personal benefits of desistance such as altruism and responsibility are also developed during this process.

8.1.6 Auxiliary Environmental Benefits influencing Desistance

- *Environmental Benefit a. Greening up the prison*

There are various kinds of sustainable programs that aim to green up prisons, save the planet and promote environmental protection. Some of the more common practices within these programs are recycling, composting, gardening, and reducing waste, water, electricity consumption and carbon footprints. For instance, the SPP in the US reduced the amount of waste produced by each offender from 2.9 to 1.5 pounds with the assistance of the offender-operated recycling and composting initiatives between 2004 and 2011 (Johnson 2012). During the same period, while the number of offenders kept increasing every year, the consumption of drinkable water decreased by 100 million gallons per year through rainwater collection in prison. A few prisons also make use of hybrid

technologies to implement security controls in order to reduce their carbon dioxide emissions (MacCready 2014).

It appears that *environmental benefit a* is thus helping prisons and the planet a great deal. Nevertheless, it does little to facilitate offenders' desistance. Interviewee E2, who ran TH programs in prison, raised a fallacy in this respect:

‘So do you think the environment like green and sustainability these kinds of things can help inmates? No way. It is not this environment we have to work on. The prison is sterile and so are the relationships [inside]. A prison is a prison, no matter how beautiful you make it. If the regime is not changed, no effective programs are in place, the trees and plants are not going to help anything. The inmates will not change to a different person just because of the trees and plants ... Mentality is more important than the environment, like Mandela. He opened his mind, Gandhi as well. He was locked up but his mind is not captured. Inmates need techniques to walk past and see life beyond, and that's what we don't teach people to do.’ (Expert Interviewee, E2)

Interviewee E2 believed that the prison regime should not simply aim to create a greener prison in order to save the environment, but needs to establish a prison environment that is suitable for offenders to learn and transform with the use of plants. In this vein, a number of scholars validate the influence of humane and open prison design on relationships within prison communities (Beyens, Gilbert & Devresse 2012; Hancock & Jewkes 2011). It is argued that prison design has a significant impact on the social interactions among prison inhabitants (Beijersbergen et al. 2016) as the prison atmosphere is affected by the prison layout or design. Without a doubt, a less rigid prison with a view of nature will be conducive to a healthier, more positive social atmosphere and to offenders' physical and mental health (Lindemuth 2007). Yet greening up the prison is not necessarily supportive of offenders' desistance. If this were the case, any prison with an open green design would report less conflict and recidivism among its offenders post release, and instead only successful reintegration. Cognitive growth through education and work is more important for teaching offenders how to cope in the face of difficulties and challenges without breaking the law. A greener environment should therefore be seen as complementary to effective prison programs that teach

offenders how to desist and equip them with skills using plants and animals as a medium. A green and open prison may only be beneficial to the prison and the authorities rather than the offenders (see more in section 8.2 Economic Sustainability).

An important note here is that positive personal changes like empathy and altruism may not emerge automatically as a result of a prisoner engaging in work around environmental protection. Sometimes lecturing, listening and sharing are required to enable offenders to develop these pro-social attitudes and to understand the harm done by themselves and other human beings to the environment and to others. An instructor of the Jane Goodall Institute's Roots and Shoots Program at the Boulder (Colorado) County Jail in the US not only teaches offenders how to save animals and the environment, but also guides them through discussions about human behaviour and nature, which ignite offenders' empathy and understanding about the impact of humans' personal choices on others:

'[The participating offenders are] uniformly against killing wolves just because they kill livestock, and they get really upset when we discuss how destructive humans can be to animals and habitats. Our discussions about hunting are very interesting, and trophy and sport hunting are really frowned upon' (Nadkarni & Pacholke 2014, p. 241).

This US-based instructor claimed that mentorship, guidance, education and communication are necessary to ensure the comprehensive transformation of offenders' behaviour and mentality. Simply asking offenders to save the environment or animals may not always help transform an individual's behaviour and thoughts or help support their journey of desistance post-release. Rather, the discussion and sharing in which they engage during their work can be key to building their empathetic and altruistic attitude. Wright and Goodstein (1989) contend that how an individual interacts with the environment around them largely depends on their human capital such as problem-solving skills and beliefs, and external intervention such as social support, highlighting the importance of the personal and social benefits of participating in sustainable work in prison. Offenders who have a stronger internal capacity are better able to adjust to the social and physical environment, and in turn to maintain their pro-social and desisting behaviour.

Therefore, essential personal changes, like empathy and altruism, could be cultivated in the process of looking after animals and conserving the environment in sustainable programs only if effective guidance and communications are also present. Through these programs, offenders can come to understand the damage caused by and impact of humans on the environment and other species. Sustainable programs not only encourage environmental responsibility but also personal responsibility beyond oneself. So, offenders also learn to recognise and reflect on the harm they have done to themselves, to the environment and to their family, other community members and society generally. Schultz and Zelezny (2003) argue that there are different motives underlying pro-environmental behaviour: egoistic, altruistic and biospheric. And these motives do not necessarily benefit offenders' desisting lifestyle. For example, one may be pro-environmental because it helps to save money or enhances one's reputation. Motives related to personal growth are more likely to sustain pro-environmental behaviour and thinking (Corral-Verdugo 2012). As personal growth in this context is more spontaneous, and aroused by one's awareness of environmental problems, such a motivation could lead to a more genuine pro-environmental mentality that is less concerned with personal gain. The pro-environmental acts can then further reinforce the offender's personal growth through such pro-environmental work unintentionally, reflecting the reciprocity between environmental sustainability and personal sustainability (see Chapter 6).

8.1.7 Concluding Remarks on Environmental Sustainability

Among the four environmental benefits outlined in Table 5.4, three have a positive impact, to various extents, on four key factors of desistance. Table 8.1 shows that all the key factors shaping desistance, except Negative Feelings about the Past, are influenced by the environmental benefits discussed in this chapter but that *environmental benefit a* is not directly conducive to desistance. Nurturing plants and animals engenders various environmental benefits that are essential for environmental sustainability, and hence desistance. Not only are they helping to conserve nature, but offenders' efforts within sustainable programs also lead them to recognise their own abilities and increase their self-esteem as well as allowing other people to appreciate them. Yet the de-labelling or recognition by significant others is often restricted to people who are closely related to the offenders, such as family or program facilitators, because most program participants

have no contact with the outside world, meaning that they have no opportunity to be appreciated by other community members. This may slightly reduce the positive impact of these environmental benefits on offender desistance.

The environmental benefits of sustainable programs extend to both the natural and social environments around participating offenders. The programs can provide a more supportive and harmonious social environment that is significant to offender behavioural changes because this environment encourages contemplation and relaxation, allowing program participants to rest and restore, both physically and psychologically (Lynn 1993). Furthermore, a more harmonious social environment can improve the safety of all prison staff, visitors and offenders. Natural and social protections are therefore both equally important to environmental sustainability, supported by human capital. Altruism and a sense of responsibility, which are also crucial personal benefits, as discussed in Chapter 6, are examples of the important human capital required to maximise the impact of environmental benefits on desistance; and they enhance many of the environmental benefits. Without these traits, while better understanding of the environment can assist offenders to grow and mature, desistance is unlikely to occur because offenders' cognitive and behavioural transformation will be limited if the focus of the program work is only on environmental protection. Greening up the prison alone thus has little pro-social impact on offenders since the prison rather than the offenders becomes the focus of the program's efforts. In addition, because environmental benefits incline towards the protection of nature, animals and plants, which is more forward-looking by definition and in practice, a vital factor of desistance, Negative Feelings about the Past, may not be enabled.

8.2 Economic Sustainability

Economic sustainability entails maintaining a micro and macro level of economy, including the personal, social and national economy. Economy is more than personal income, taxation or stock markets; it also involves social services and welfare such as education, healthcare and, of relevance here, the prison system (Anand & Sen 2000). Politicians and the public are always concerned about the cost of operating prisons because they use taxpayers' money, making the building of cost-effective prisons an essential topic to discuss (Little 2015). Therefore, 'cost-effective' is usually prioritised

over ‘desistance-effective’ or ‘rehabilitation-effective’ as an underlying aim of prison operations. It is important to acknowledge that operating a prison should never be considered an economy-boosting industry because the cost of running a prison is extraordinarily high and generates no profit (Wacquant 2012). Those prisons, usually private prisons, that are able to make profits are deemed to be exploitative and bureaucratic (Wacquant 2012) and generally do nothing to help offenders to transform and desist.

This section will explore the extent to which the identified economic benefits of TH and animal programs impact offender desistance. Table 5.5 presented four economic benefits identified by the literature and interviewees. However, the contributions of TH programs and animal programs to economic sustainability were not discussed at length by the interviewees; indeed, only three interviewees (E5, P2 and O3) shared their opinions and concerns about this. Both the primary and secondary data referenced in this section is relatively limited. Table 8.2 lists these four economic benefits and their associated desistance factors from the five key factors of desistance, based on the interview findings and the limited literature on this issue.

Table 8.2 Linking Economic Benefits to the Five Key Factors influencing Desistance

Key Factors of Desistance	Economic Benefits
Positive Feelings about Self and Future	b. Saving up / planning for post-release life/family
Negative Feelings about the Past	-
De-labelling and Recognition by Significant or Respected Others	-

Strong Pro-Social relationships with Society	-
Maturation	b. Saving up / planning for post-release life/family
Auxiliary Economic Benefits influencing Desistance (Do Not Directly Contribute to Desistance)	a. Support offenders' own daily necessities in prison c. Saving operational expenses for prisons and governments / Contributing to the national economy d. Reduced costs of environmental conservation

8.2.1 Positive Feelings about Self and Future

- *Economic Benefit b. Saving up / planning for post-release life/family*

Some sustainable programs provide offenders with a wage to allow them to save for themselves, their family or their post-release life, or to provide some recompense to their victims. Many offenders lose their ability to financially support their family once they are incarcerated, which may greatly affect their family's lives, especially those who have children. When they are released to the community, they may suddenly become a burden on their family or friends as it is challenging for them to find a job or housing with a criminal record. Most leave prison with little money. Interviewee E5, who monitored sustainable programs, said that many prisoners leave prison with around AUD200, which, if they are lucky, might cover their rent for one week, and argued that prisons should not exacerbate the problem of poverty facing released offenders, which can directly lead to crime or recidivism (Imran, Hosen & Chowdhury 2018):

'Poverty is linked to crime; prisoners are linked with poverty. That's why at least 50% of them go back [to prison] ... Some can earn through work [in prison], but some don't get paid for their jobs ... Unemployment rates of the released are very high in Australia, UK and US. Job agencies usually receive funding to help people

with special needs, not the prisoners ... They don't get paid in prison and they can't get a job easily after leaving prison. How do they survive normally?' (Expert Interviewee, E5)

Interviewee E5's description applies to a large proportion of prisoners, especially those with an addiction, for instance, to Coca-Cola, cigarettes, gambling or drugs, or who have trouble managing their finances. For these offenders it is particularly difficult if not impossible to save money while in prison, for their life post-release or for their family. Among such offenders, this may foster a sense of irresponsibility towards their family or society, or worthlessness, thereby undermining the factors that lead to desistance.

In this regard, Interviewee P2 said that the animal program in which he participated was different from other programs because it not only taught him to rear animals but also to manage his finances. He stated that his program entailed both hands-on practice and education for daily life, including financial education, which was so different from traditional programs:

'You can give input [to society] because I pay the tax ... for other [rehabilitation] programs they don't have jobs or income and I can't even save for a little gift to my daughters ... The program let me know financial literacy. It's basic for everyone and you have to know. You don't have to sign up for every card. You learn how to say no. You learn how important to have bank accounts.' (Previous Program Participant, P2)

Interviewee P2 credited part of his success in desistance to the program's comprehensive modules that have taught him the economic skills needed to survive in the outside world, which is rare among the prison programs in which he had participated. In some jobs performed by offenders, like heavy industry, the workers are paid, yet this does not happen in all prisons. Interviewee P2 believed that it is important that program participants be paid for their work, no matter how much, and that there needs to be a module within a sustainable program that teaches offenders how to organise their finances. Such education would provide participants with a real-life opportunity to exercise financial management and increase their personal and national economic sustainability. Interviewee P2 considered paying tax to be a source of pride and was

delighted that he was able to save up for himself and his family, even though the amount saved was small. He could regularly send money to his family to fulfil his obligations as a father, eliminating his sense of worthlessness and increasing his knowledge and confidence in relation to reintegration and desistance, as he built his identity as a responsible father.

8.2.2 Negative Feelings about the Past

As suggested by Interviewee E5, poverty, crime and offenders are closely linked. This connection is supported by scholarship (see, for example, Hooghe et al. 2011; Imran, Hosen & Chowdhury 2018). Many offenders live in poverty or face financial difficulties (Sileika & Bekeryte 2013). Interviewee P2 reported that his pre-incarcerated lifestyle reflected this phenomenon: ‘I had no savings. I spent every cent I earned ... people look down on you if you have no money’. Undoubtedly, this will lead to negative feelings about the past, which will not be conducive to desistance.

As discussed in previous chapters, some negative feelings, such as guilt, regret or being sorry for one’s actions, can lead offenders towards reflection or to appreciate what it is like to be in others’ shoes, and in turn to learn from the past. They may learn to be more empathetic, altruistic, responsible and thoughtful towards others. However, the negative feelings caused by financial difficulties may engender the opposite. In recalling unpleasant memories of their life before incarceration, offenders may experience negative emotions such as sadness, humiliation and desperation, as occurred for Interviewee P2. These feelings may lead to stigmatisation, which is not beneficial to desistance and fosters criminal subcultures (Braithwaite 1989). Hence, great care must be taken when allowing negative feelings to be aroused or discussed in sustainable programs.

8.2.3 De-labelling and Recognition by Significant or Respected Others

As discussed in sections 6.3, 7.3 and 8.1.3, the positive outcomes produced by offenders’ work in sustainable programs may facilitate recognition and de-labelling by significant or respected others. Nevertheless, it is less likely that economic benefits will directly benefit this factor of desistance. When offenders earn money through prison work or programs, it is unlikely that many people will be aware of their gain. Hence, any positive impact based on de-labelling and recognition may at best emerge only among a few family

members or close staff members and program facilitators. Similarly, offenders' contributions on prison or national economy are also unlikely to cause de-labelling or recognition with ease due to the same reason. In addition, most government or penal reports will publicly announce the costs of operating prisons, but the savings in relation to operations, public funding or environment protection made by prisoners are much less likely to be made public, so that the contribution of offenders will remain hidden. The ongoing lack of recognition of such contributions to the economy and the blaming of prisoners for costing taxpayers' money will together impede the development of desistance. Therefore, there does not appear to be a direct relationship between economic benefits and De-labelling and Recognition by Significant or Respected Others.

8.2.4 Strong Pro-Social relationships with Society

As discussed in Section 8.2.3, earning for oneself or one's family tends to be a personal matter that is not shared with others. No interviewee in this research suggested any connection between offenders' economic status and their relationships within their pro-social networks. Although Interviewees E1 and P2 perceived the economic gains made in prison as symbolic of an offender's renewed sense responsibility towards one's family (see section 8.2.1), they mentioned nothing about the national economy. Interviewee O3 argued for the cost-efficiency of sustainable programs, which is discussed in Section 8.2.6 below; but he did not link this economic benefit to any factors of desistance.

It can be anticipated that if the macro-level cost savings enabled by offenders were communicated to the public, the public would likely have a better attitude towards offenders and the relationship between the two parties may be improved. However, based on the interview findings and the existing literature, personal or national economic benefits do not help offenders to develop stronger pro-social relationships with society.

8.2.5 Maturation

- *Economic Benefit b. Saving up / planning for post-release life/family*

Saving up for one's future or family may reflect one's maturation to a certain extent, as saving money requires a new idea of and approach to living. As interviewee P2 recalled, he used to have no idea about effective financial management, for himself or for his family:

‘[After participating in the TH program] I learn to set up saving target, to save up for my everyday essentials and my daughters. I spend less on non-urgent stuff like cigarette and chocolate. If I have some cents left [after deducting all the necessary expenses], I’ll then buy some sweet or soft drinks for a bit of joy.’ (Previous Program Participant, P2)

Interviewee P2 learned how to use money wisely and responsibly through the financial education embedded in the TH program. His new behaviour reflects a form of delayed gratification that helped him to reduce his impulsivity, which is considered a trait of criminality (Gottfredson & Hirschi 1990). P2 learned to suppress his need to seek instant gratification by spending his money on the important and essential items first, such as supporting his family, demonstrating his maturation. Other personal benefits vital for desistance are also illustrated in this case, including but not limited to having a sense of responsibility and altruism towards one’s family (see Chapter 6).

Beyond this, there is no evidence, from either the literature or the interviewees’ testimonies, that providing offenders with an income in prison, reducing the costs of prison operations and environmental conservation will lead to significant maturation and desistance.

8.2.6 Auxiliary Economic Benefits influencing Desistance

- *Economic Benefit a. Support offenders’ own daily necessities in prison*

Financially supporting oneself in prison is not easy. Although some of the sustainable programs incorporate personal economy as a module, such as the leading example of SPP, improving one’s ability to financially support oneself is not necessarily conducive to desistance.

Receiving income in prison may imitate the economic system in the outside world, allowing offenders to learn to better manage their finances and needs. Hicks (1946, p. 172) believes that the purpose of income should be seen as ‘a guide for prudent conduct’ of an individual:

‘the purpose of income calculations in practical affairs is to give people an indication of the amount which they can consume without impoverishing themselves ... we

ought to define a man's [sic] income as the maximum value which he can consume during a week, and still expect to be as well off at the end of the week as he was at the beginning. Thus, when a person saves, he plans to be better off in the future; when he lives beyond his income, he plans to be worse off.'

Hicks highlights the importance of balancing income and expense in order to secure a better future life. This notion should apply to all people, including offenders who are working in prison and able to plan for their everyday expenses.

Nonetheless, even though working in sustainable programs may allow offenders to earn money, their wages are still low, as they are in traditional prison programs, which makes it difficult for them to save and plan for the future. Their hourly rate, which can be as little as several cents per hour, restricts them from spending and saving as most wage earners outside prison are able to do. If they want to purchase a pouch of tobacco, it might cost a week's salary; and one day's salary may only be enough for a bar of chocolate. Thus, this does not reflect the normal practices of earning and saving for most people in the outside world, failing to allow offenders to experience normalisation of life. And this scenario will not only fail to teach offenders the financial management skills they will need after release, but it may also lead to negative emotions such as frustration, because their effort in working is in no way proportionate to what they earn. The supposed benefits of teaching prisoners how to manage their finances after release may therefore be unrealistic when the idea and practice of saving and spending while in prison will vary so significantly from real-world financial management. Although this is not just a problem found in sustainable programs, earning money through a prison program in order to financially support oneself will not be enough to secure one's future personal economy or desistance if an adequate income cannot be sustained in the long term.

- *Economic Benefit c. Saving operational expenses for prisons and governments/ Contributing to the national economy*
- *Economic Benefit d. Reduced costs of environmental conservation*

While *economic benefit a* concerns offenders' present economic status, *economic benefits c* and *d* reflect how participants of sustainable programs can provide benefits for the national economy. Some sustainable programs may save taxpayer money by providing food to prisoners, either in the same prison or another prison, while some may

reduce the costs of training or saving animals and reduce the consumption of resources within a prison (MacCready 2014). However, these benefits may have little to do with facilitating desistance as saving money rather than offender transformation becomes the aim of the program.

A vital benefit for the national economy can be attributed to lower recidivism rates. Many sustainable programs have led to extraordinarily low recidivism rates among their participants, as discussed in Section 7.6, which could mean less incarceration and hence less operational expenditure for prisons and governments, helping the country to save millions of dollars each year and increasing the number of responsible citizens who pay taxes. Nonetheless, Interviewee O3 commented that, during his tenure, he had heard rumours about political lobbying that argued that sustainable programs were expensive to run. However, he claimed that sustainable programs actually cost very little to set up and help to save money for the prison, the government and the public in the long run:

‘Usually the government says it’s more expensive, it’s too expensive for these [sustainable] programs. That’s bullshit ... We grow our vegetables for sale, for prisoners to eat. If you compare the cost of our prison to others in the state, I’m fairly confident that what you see is cost-saving dollars ... You also end up getting less assaults. Less misbehaviour is gonna use up less resources and you’re holding the environment then it’s completely different experience. I think it is cost-benefit.’ (Ex-Prison Officer, O3)

Research supports Interviewee O3’s claim that these programs save money. For instance, Sandel (2004) and MacCready (2014) argue that setting up a TH program only requires a few hundred American dollars, and further that the tools and seeds needed are not expensive and that some can be acquired through donations. In Texas, the Denton Post Adjudication Secure Treatment Facility, which is a long-term detention facility, started up and maintained their garden program for offenders without using any public money (Sandel 2004). All the equipment, materials, seeds and plants were donated by staff and communities. Not only are they inexpensive to establish, but the costs of maintaining these programs are also not high because they help the prison to save money. MacCready (2014) has explored 10 TH programs and argues that a TH program aiming to continuously supply food to the prisons in that same prison by harvesting 50 to 60 pounds

(22.68kg – 27.22kg) of vegetables every day can save around USD10,000 of prison expenditure during harvest season. The cost of one pound of fruit and vegetables can be as low as USD0.08 cents. The plant growing program Lettuce Grow Foundation, based in Oregon, has reduced food expenditure by growing vegetables for offender consumption (MacCready 2014). And any surplus is distributed to the local community to support people in need of fresh food. The SPP has been described by Ulrich and Nadkarni (2009) as offering inmates effective collaborative education about the environment. It not only provides participants with the opportunity to undertake placements in conservation and restoration work but has also reduced prison operational costs and carbon emissions by about 40 per cent since 2005 (Warner 2013).

Animal programs are also inexpensive to operate and therefore provide cost savings. The duties of an offender working in a sustainable program can be highly professional, and it would be costly to engage such a worker in the outside community (Kohl 2012). Offenders caring for endangered species is one of the main examples of such highly skilled and valued work. Significant knowledge of aspects of ecology and biology is involved in such a role, which usually requires people with a relevant bachelor degree to perform. When these duties are allocated to offenders, governments and communities can therefore save a great deal of money on hiring professionals in the area of species and habitats conservation. Furthermore, while the usual cost of training a service dog in the outside world may be more than AUD40,000 (Assistance Dogs Australia 2020), in prison this cost can be kept extremely low, mainly because offenders' wages are far lower than the average wage (Kohl 2012). The only other expenses within animal programs are animal food and supplies, and the payment of wages to professional staff, where required (Strimple 2003). The programs are able to save on operational costs because no specific equipment is usually needed; meanwhile, public expenditure on training service animals can be greatly reduced. Furst (2006) has carried out research on the operations of animal programs across the US. He found that more than half of the 34 facilities that implement animal training programs receive donations from community members, prison staff and local business. Many of these programs also receive free animal check-ups offered by local vets and free pet food from local companies. Therefore, what is primarily needed to set up and operate a TH program or animal program is space and time rather than money, in addition to human resources.

Despite all these benefits, there is research indicating that a small number of prison staff would not recommend animal programs to other prisons because these programs do not offer any financial reward to the prison (Furst 2006; Kohl 2012). This reflects a common belief and misunderstanding that offenders working in sustainable programs should be helping the prison either to earn or save money; otherwise, the programs may become redundant. Having prisoners contribute towards the reduction of prison expenditure symbolise them being responsible for the daily expenses of incarceration, as participants of TH programs and animal programs contribute to the national economy by saving on the costs of operations, food and social services. Nevertheless, offenders' effort may not only be undermined by the public, the perceived exploitation found in the programs may develop a sense of unfairness that can negatively affect their attitudes towards authorities and society.

It is common that working offenders in the US are paid less than USD1 per hour, while in most countries they are paid nothing (MacCready 2014). Prison labour can be a form of exploitation that prevents offenders from accessing economic justice and equal opportunity, regardless of whether or not the program is sustainable. Schrift (2008) argues that prison labour in reality yields around 1,000,000 pounds (453,592.37kg) of produce per year but the average income for each offender is between 2 cents and 20 cents per hour, while Johnson (2012) claims that the wage of workers in the SPP is 42 cents per hour (the standard prisoner wage across US prisons at the time), revealing a 'tacit' exploitation of workers, who are 'being punished'. Some countries, like the US and China, have legislation forcing incarcerated offenders to work so as to help offset prison operational costs (MacCready 2014). In addition to encouraging the exploitation of prison labour, this may promote the use of imprisonment insofar as offenders are viewed as 'productive', which is against voluntariness, human rights and justice, and may build an unhealthy prison subculture. An underpaid workforce is thus one of the main contributors to the perception of unfairness that even participants of sustainable programs cannot cast off, thereby diminishing offenders' motivation to desist from further offending.

Moreover, offenders' working conditions, including workplace safety, may not be of an

adequate standard as the outside communities (MacCready 2014). In the US, there are e-waste recycling projects that endanger the health of working offenders and are described as ‘toxic sweatshops’ as the prisons fail to protect participants under their responsibility of care (Kaufman 2010; White & Graham 2015, p. 859). Such treatment can reinforce the notion of stratification between offenders and other members of the community and encourage the system to take advantage of others’ misfortune and manipulate them, rather than promoting a fair society. Furthermore, prison labour under many circumstances is not voluntary in nature which may then affect offenders’ level of engagement and lead to coercion or exploitation (see more in Section 9.2). All of these may affect offenders’ journey of desistance because the prison fails to guide them in how to live like a ‘normal’ person after release. What prisoners learn instead is how to oppress or exploit other people in order to fulfil one’s own needs, as they find no economic justice in either the prison or the outside world. Given the very low income they receive for working in prison, offenders are not encouraged to rethink their wrongful past because their treatment by the authorities is similar to their own treatment of their victims, that is, exploitation and manipulation. They can also hardly imagine a bright future for themselves since they understand that the outside job market is very competitive and offenders have less chance than their criminal record-free counterparts, no matter how hard they have worked or how well behaved they have been while in prison. It is significant to note that benefiting the national economy does not necessarily help offenders to desist or not reoffend. When there is no economic and social justice among communities and released offenders find little hope in their employment prospects, they could perceive a great deal of unfairness and inequality in the world. While they endeavour to transform, desist and stay away from crime, the community offers them little or no chance to compete with the non-offenders in the job market. Desperation and frustration may then lead to reoffending for economic necessity or reward.

In this regard, the project co-director of the SPP, Dan Pacholke, raised the importance of cultivating positive changes in inmates’ behaviour and a better mental, emotional and social state compared to the day they entered prison. He also argued that the SPP has been able to lessen the ‘environmental, economic, and human costs of prisons by inspiring and informing sustainable practices’ (quoted in Gallagher, 2013, p. 1). This suggests that sustainable programs should perhaps de-emphasise the economic benefits

of such programs for offenders since this could lead program participants to assume a negative, anti-social attitude, rejecting the required pro-social mindset of desistance. If the essential elements of desistance are difficult to cultivate, the pathway to desistance may be rocky and paved with trouble.

8.2.7 Concluding Remarks on Economic Sustainability

Table 8.2 aligns the economic benefits of sustainable programs with the five key factors of desistance. It shows that only *economic benefit b* is influential on desistance as offenders are able to learn to plan for their future and take responsibility for contributing to their family's living expenses during incarceration, demonstrating their positive feelings towards themselves and their future as well as their maturation in financial management. The other three economic benefits are only slightly beneficial to desistance as the negative feelings about one's life prior to incarceration and the perceived unfairness of prison labour may lead to an unrealistic picture of how the outside world functions. Also, the lack of recognition of prisoners' contribution towards saving public money may extinguish their motivation to do good for society. Most of the benefits resulting from participation in sustainable programs are rarely seen by the public because most national reports do not communicate the money that offenders or prison programs save for the country; instead, the expenditure on incarcerating offenders and related costs are usually highlighted (Strimple 2003). All these factors may steer offenders away from adopting a pro-social attitude and behaviour towards the community.

Learning how to manage one's financial situation is only one of the means by which offenders control their expenses and savings. However, such skills are essential even for children, so this is not necessarily a key factor that supports desistance to any great extent. To enhance its influence, a prison program must increase offenders' human capital instead of merely focusing on money saving or earning. The best and most effective approach to saving taxpayer money is not to limit prison operational costs, reduce prison resources and encourage low-paid prison labour, but instead to support offender transformation and thereby enable their desistance through the provision of effective prison programs that enhance all aspects of human capital. The value of innovative, sustainable approaches such as TH programs and animal programs that teach offenders life-enhancing skills and cultivate a pro-social attitude in keeping offenders out of the

criminal cycle is recognised by researchers around the world and by the interviewees in this study. Such programs help to reduce the number of reoffenders and the corresponding cost of incarcerating them, and bring other personal, social and environmental benefits that are all intertwined in promoting desistance (see more in Chapter 8). Consequently, offenders will not be the sole beneficiaries of sustainable programs, as animals, nature and the public are going to benefit as well.

Conclusion

The five key factors of desistance are supported to different degrees by enhancing environmental sustainability and economic sustainability, as demonstrated in the previous two chapters. Nevertheless, the environmental and economic benefits are less likely to directly affect the five factors of desistance than are the personal and social benefits. In this, the environmental and economic benefits share a main characteristic: they exert a more indirect effect, and only once the personal and social benefits are in place, implying that they cannot stand alone without the existence of personal sustainability and social sustainability. This suggests that personal sustainability and social sustainability are the more important determinants to promote desistance while environmental sustainability and economic sustainability are the sub-determinants that have a lesser impact.

Three environmental benefits have a substantial influence on four of the five key factors of desistance, excluding Negative Feelings about the Past. Both the physical and social environment of the prison can improve offenders' tendency to develop a lifestyle of desistance. Nonetheless, one of the most prevalent benefits of running a sustainable program in prison, *greening up the prison*, surprisingly has no positive effect on desistance as it emphasises sustaining prison operations rather than offender transformation.

The four economic benefits make even less of a contribution to enabling desistance. Only one of them, *saving up / planning for post-release life/family*, has a direct impact on developing positive feelings towards oneself and one's future, and enhancing one's maturity. The other three economic benefits mainly support the national economy and prison costs. Hence, offenders' needs in relation to livelihood, desistance or reintegration are less likely to be looked after or dealt with. Therefore, both environmental

sustainability and economic sustainability have a more supplementary role in facilitating desistance. The next chapter will further explore the relationships of the four aspects of sustainability and the implementation of TH programs and animal programs.

*Chapter 9 Discussion and Recommendations on the Use of
Sustainable Programs*

The key outcome of the analysis presented in the preceding chapters was the identification of the factors arising from TH programs and animal programs across the four domains of sustainability (personal, social, environmental and economic) that in various ways support offenders to begin a journey of desistance while still in prison. It is found that these two types of sustainable program significantly benefit participants' personal and social growth, which resonate with the two main concepts identified as important in the desistance literature (that is, personal agency and social attachment). The environmental and economic benefits, on the contrary, have a more indirect impact on promoting desistance. Based on these results, this chapter presents a proposed schema (see Figure 9.1) for TH programs or animal programs that will be effective in fostering desistance among prisoners and can be used to guide the future development of similar programs. The connections between the four pillars of sustainability are represented in the diagram.

This chapter will also discuss five critical issues that this research has unearthed that may affect the implementation and success of sustainable programs in prisons. Suggestions for how these issues can be addressed will be outlined, drawing on the analytical results, interviewees' testimony and relevant literature, in order to increase the use of sustainable programs in prison and enhance their effectiveness in promoting desistance.

9.1 How should a Good Sustainable Program be Constructed?

As demonstrated by the literature review and the data collected for this research project, stakeholders tend to place much more emphasis on personal and social benefits than they do on economic and environmental factors in relation to desistance facilitation via implementing TH programs or animal programs in prison. This can in part be explained by the more obvious manifestation of behavioural or attitudinal changes observed or perceived by the interviewees. While these changes are paramount in revealing the positive impact of sustainable programs on desistance, the roles played by economic and environmental benefits are also crucial. I have deemed the latter two benefits to have a

supplementary role alongside personal and social benefits because they are less likely to contribute directly to desistance on their own, but they are still important in shaping the overall approach to how desistance can be facilitated and supported in prisons. However, it is important to note that the economic and environmental benefits require personal and/or social benefits to be in place first, as they will have little, if any, effect on their own – hence their status as ‘supplementary’ or ‘supporting’ factors.

The literature suggests that different approaches have to be combined in a program to yield the best results for offender rehabilitation, such as job training, education and counselling (Crow 2001; Palmer 1996). Personal sustainability and social sustainability, which encourage behavioural and cognitive transformation within oneself and towards other people and species, are able to facilitate desistance through participation in TH programs and animal programs in prison, as illustrated in Chapters 6 and 7. The analysis indicates that an effective sustainable program should not only enable skills development and family engagement, but also offender behavioural or cognitive transformation (Palmer 1996) as well as the development of human and social capital in order to promote desistance. Therefore, a successful sustainable program boosts offenders’ personal sustainability and social sustainability by equipping them with technical skills, life skills, work experience, knowledge, behavioural changes and social networking. Among all the personal and social benefits, some are more commonplace and necessary in helping the other two types of sustainability (environmental and economic) to develop, such as ‘building empathy’ and ‘being altruistic’ (see Chapter 5). Chapter 8 showed that economic sustainability and environmental sustainability can be fostered by sustainable programs and in turn can facilitate desistance to a certain, though less significant, extent. One important point to note is that most of the economic and environmental benefits that can contribute directly and significantly to desistance intersect with the personal and social benefits discussed in Chapters 6 and 7. This means that the economic and environmental benefits are less likely to be cultivated in the absence of personal and social benefits.

Figure 9.1 demonstrates how a sustainable program supports desistance through the development of the four aspects of sustainability. For instance, this research shows that ‘building empathy’ and ‘being altruistic’ are two personal benefits that are vital for

developing one's personal sustainability and can help facilitate desistance; and they are also found to be indispensable in the cultivation of economic and environmental benefits such as 'saving up / planning for post-release life/family', 'conserving special / endangered plants / animals in prison' and 'improved understanding of / reduced harm to the environment' (see Chapter 8).

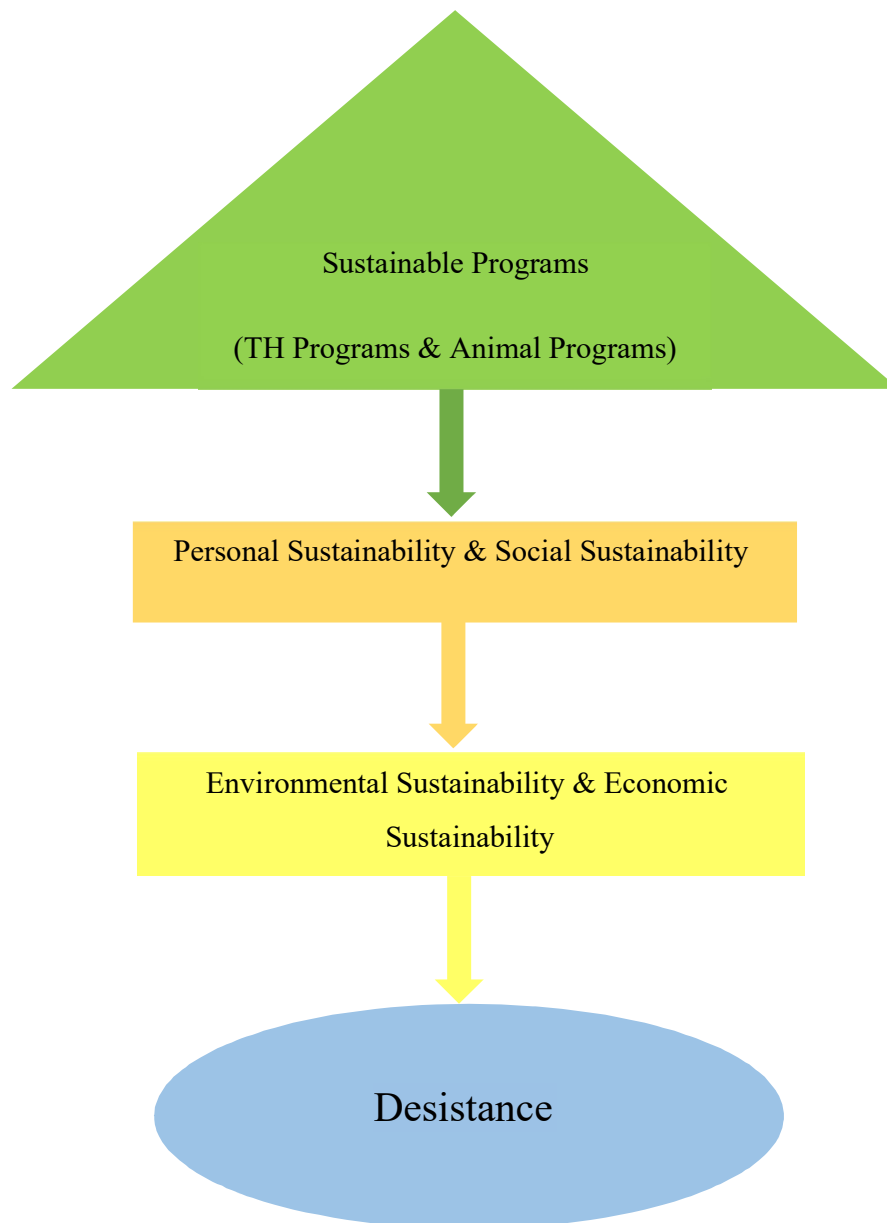


Figure 9.1 The Impact of Sustainable Programs on Desistance

Either direct or indirect engagement with the natural environment will strengthen the relationship between knowledge, attitudes and pro-environmental behaviour (Duerden & Witt 2010). A good sustainable program not only uses the skills and time of offenders to save on prison operational costs or to green up a prison, but it also provides the participants with the opportunity to grow, personally and socially. Without the growth of personal and social sustainability, economic and environmental sustainability cannot develop, and there will be limited impact on desistance. In the US, the participants of one sustainable program were able to present the findings of experimental research they undertook as part of the program to an annual meeting of scholars of ecology, and then went on to study in the area at graduate school (Ulrich & Nadkarni 2009). Their sustainable work in prison offered them a chance to save animals and the environment as well as giving them knowledge, experiences, connections, confidence and employability to face their post-release life, boosting the four aspects of sustainability as a whole to foster desistance. Figure 9.1 may provide some guidance on the future development of sustainable programs, to create programs that prioritise personal sustainability and social sustainability and therefore have greater effectiveness in transforming offenders and supporting their path to desistance.

Furthermore, the coming sections will explore five issues that are closely related to these two more crucial aspects of sustainability and that are also influential in improving sustainable programs and in turn offender desistance. The five issues explored are the voluntariness of offender participation in sustainable programs, wider involvement of community members in the program, the impact of offenders' overconfidence and overpromising with regard to desistance, improvement of Indigenous offender engagement in prison programs and the problems that sustainable programs cannot help offenders to solve.

9.2 Should Sustainable Programs be Made Mandatory or Completely Voluntary?

It is essential to recognize that the extent of voluntariness of participation in programs is contingent upon policies, contexts and opportunities, and not all prison work is socially and personally productive for the participating offenders. Although prison labour is generally viewed as exploitative and coercive (White & Graham 2015), the discussion

on voluntariness in this section focuses chiefly on genuine voluntariness that will not incur any negative consequences even if the offenders refuse to take part in any sustainable program suggested by the prison staff. While complete voluntariness may not be always feasible in prison, this section explores interviewees' attitudes towards voluntary and mandatory participation of the programs and the corresponding impact on offender desistance. Because many of the interviewees did not know or were not exposed much to these administrative matters, this thesis lacks in-depth data about selection processes of their involved programs, yet their standpoints towards voluntariness have been well captured. The interviewees in this research took one of two views on the importance of voluntariness of offender participation in sustainable programs. About a half of the interviewees (P1–P4, O1, O2, O4, and O5) believed that participation should be voluntary in nature, while the rest (O3 and E1– E8) thought it would be more desirable for programs to be mandatory for all offenders. It is noted that all the expert interviewees, who either regularly or occasionally run sustainable programs, supported the idea of making sustainable programs mandatory for all offenders. Interviewee E2, who volunteered to run a TH program, said that:

‘It [the program] should be mandatory in an ideal world, yes, because the evidence, it’s there, it works. But realistically that probably wouldn’t happen.’
(Expert Interviewee, E2)

These supporters of mandatory sustainable programs believed that all participants of these programs would benefit in different ways and that therefore they should all be given a chance to take part. According to the interviewees' own experiences and their knowledge of other successful practices around the world, sustainable programs can be life-changing for offenders. Despite this, they felt that making these programs mandatory would be impossible to achieve due to certain social and political issues, and these obstacles are discussed in more detail in section 9.3.

On the other hand, most previous program participants and ex-prison officers considered voluntariness to be more important than compulsoriness. They argued that no one should be forced to join any program and they should have the right to self-nominate themselves if they are interested in any program. Interviewee O5 shared his views, based on his

experience of operating an animal program for four years:

‘it [transformation] is dependent on whether the participant is ready, willing and wanting to change. It makes it difficult when people are mandated to complete a program because they are all at different stages of change and some may not be ready to change. But if they start to be interested in education or vocational training, that means they’re preparing themselves to change.’ (Ex-Prison Officer, O5)

Interviewee O5 thus claimed that not every offender is well-prepared for change. If they are forced to join any program, even a sustainable program, the outcome will not differ much from that of coercing them to join a traditional prison program. No single program fits all kinds of offenders as they are all at different stages of transformation and desistance, even when they have committed the same type of crime. Some of the interviewees believed that coercion and unwillingness to participate (found in traditional programs) can be avoided under this approach, and that offenders who are made to participate may cause trouble in the program or disturb other participants.

While the issues around whether a program should be voluntary or mandatory are complex, Interviewee P2 raised the pragmatic question of when an offender feels adequately prepared to join a program, and he claimed that this shift will ‘maybe [take] forever’. Although he personally agreed that voluntariness is important to avoid troublemakers in programs, it also prevents many willing offenders from taking a step forward because many will always feel unprepared to start new things in prison. According to his experiences, complete voluntariness may not always be the best option. Several prison staff recommended that he participated in an animal program, making him feel some pressure from authorities to do so. However, he asserted that if no staff had ever suggested such to him, he would never have discovered his devotion to environmental work, which has helped him to establish his career after release. Therefore, he argued that complete voluntariness or preparedness does not exist or is not essential to enable offenders to engage in sustainable programs.

Research by Becker (1970, p. 287) supports this way of thinking. He argues that, while facilitating personal change, there is no need to deliberately develop particular

characteristics before altering one's behaviour:

we need not try to develop deep and lasting interests ... in order to produce the behaviour we want. It is enough to create situations which will *coerce* people into behaving as we want them to and to create the conditions under which other rewards will become linked to continuing this behaviour.

Becker's claim emphasises that having an interest prior to behavioural changes occurring may not be needed. This explains Interviewee P2's circumstance. He used to have no idea or interest in animal rearing or environmental protection, but since he was invited to join an animal program, his incarcerated life was changed and so did his post-release life. His empathy towards other species and nature was deliberately fostered, and no prerequisite courses were needed. He adapted to his new role successfully and changed in response to his participation in the program and through caring for animals. Such phenomenon supports that desistance is dependent on personal change that can occur when human beings adjust themselves to meet the expectations of their new roles (Sampson & Laub 1993). Desistance can thus naturally develop as a result of a new role providing an offender with more rewards than did their offending.

Therefore, complete voluntariness in joining sustainable programs may not be the best approach to recruit participants. There could be various reasons impeding offenders self-nominating or applying directly to the prison staff. Suggesting or nominating an offender to take part in the program may enable important outcomes for the offender, like Interviewee P2, as this can engender a sense of pride and recognition by others, both of which are essential for desistance, as discussed in Chapter 6. A self-fulfilling prophecy may be aroused by the encouragement or recognition by prison staff. A well-known experiment related to treating alcoholism conducted by Leake and King (1977) revealed a similar outcome. In this study, the randomly selected target patients and the control group were exposed to the same conditions, but the staff who were responsible for the target group of patients demonstrated a much higher level of belief in the patients' abilities to succeed in sobriety. The target group achieved a much better result than the control group. This experiment indicates that complete voluntariness is not necessary for success in a program as the target group was selected by the staff, meaning that they were also not completely voluntary to participate like the control group. In contrast to

Maruna's (2001) assertion that a redemption script must be developed before desistance may occur, the present study suggests that offenders may begin to change without any conscious plan to pursue desistance. Sufficient encouragement and recognition through suggesting or nominating an offender can also lead them to positive changes and then to a desisting life. Differing from coercion, nomination imposes no negative impact on offenders' performance in the programs, according to the previous program participants in this research, but helps them to discover their own merits and abilities that they might have never before realised. Hence, nomination may assist the participating offenders in building their career and desistance pathways by giving them a choice like other ordinary employees and retaining genuine voluntariness which may otherwise limit the effectiveness of sustainable programs and result in rebellion due to involuntary or mandatory participation.

Beyond voluntariness, offender eligibility and availability of the program are two other significant but uncontrollable factors that need to be considered. Screening of eligible participants for sustainable programs is typical in prison, in which personal characteristics like the nature of the prisoner's offence/s and their behavioural record in prison are considered (Furst 2006). The screening process may favour non-violent or non-Indigenous offenders more, as described by Interviewee O4. Interviewee E4 also said that some of the offenders sought help from the program facilitators because their peers were not able to get into their preferred sustainable programs even though they had established a record for good behaviour and performance while in prison. Interviewees O1 and O2 similarly raised that many offenders who wished to engage in sustainable programs were not eligible for various reasons, such as their behaviour, length of sentence or relationships with peers or staff, not to mention because of insufficient resources to provide enough program places, despite the fact that neither TH programs nor animal programs are expensive to run (see Chapter 8). All the interviewees agreed that these factors are not the best criteria for deciding who should be eligible for these programs but that prison management had no option in this regard. It is more likely that offenders convicted of violent offences and Indigenous people will have less opportunity than their counterparts with similar profiles to access sustainable programs and hence less chance of experiencing a new desistance-building program.

Given that offender behaviour and attitudes can be changed through a good sustainable program, it would be worth expanding the eligibility of participation beyond well-behaved offenders and making the programs available to more if not all offenders. This could be a groundbreaking opportunity to transform the difficult or rebellious offenders. Ironically, while sustainable programs do benefit most participants by changing their behaviour and attitudes, most of these participants were already considered good or well-behaved prior to their participation. The programs undeniably enhance their positive sides and minimise their negative ones, but such an opportunity should be granted equally to all offenders, regardless of race and offence. Therefore, if more resources or funding were allocated to sustainable programs, many more offenders would have the chance to learn and grow through the care of the environment and animals.

9.3 Why and How should Society be Involved in Prison Sustainable Programs?

The common challenges facing prisons in relation to implementing more sustainable programs and released offenders staying on their desistance journey are that political lobbying around ‘tough on crime’ agendas is prevalent and that society may not genuinely want to reaccept offenders into the community (Maguire & Raynor 2006). To resettle the released, social exclusion and stigmatisation have to be eliminated so that the released can be valued as contributing citizens. Nonetheless, this can be difficult to achieve, even in the countries that are implementing sustainable programs, because public hostility towards offenders and the released is commonplace while governments and politicians around the world promote a stance of being tough on crime, which is fuelled by populism (Maguire & Raynor 2006). Thus, the negative sides of offenders are emphasised far more than their good sides. For example, the public usually only knows how much the prison system costs taxpayers but not how much offender work can save for the public. Therefore, communication by government and public education have a vital role to play in eliminating the labelling of and discrimination towards the released and helping them to sustain their desistance. This section outlines two significant impediments to the successful reintegration and desistance of released offenders: (1) prejudice against offender education and vocational training, and (2) ingrained socio-cultural beliefs about offenders.

9.3.1 Relieving Prejudice about Offender Education and Vocational Training

First, there is denial among politicians and communities about the need to educate sustainable program participants, which may impede them from succeeding in their desisting journeys. Two of the interviewees (E7 and E8), who were responsible for organising and running sustainable programs with more educational elements, pointed out that the authorities and society tend to believe that it is unnecessary for offenders to undertake higher education in prison. They spoke about their observations and concerns:

‘Higher education can be transformative ... Sometimes we know the released won’t be employed even they have finished their courses so don’t waste your time, don’t make yourself painful.’ (Expert Interviewee, E7)

‘with this particular master student, I don’t think Corrective Services was particularly supportive of the idea of him doing the master’s [degree] because he’s going to be long- term incarcerated and possibly never released, so what’s the point of him doing a master’s.’ (Expert Interviewee, E8)

These testimonies suggest that offenders are denied not only of the right to an education but also of their citizenship and the right to advance themselves, which should be available to all citizens. Interviewees E7 and E8 believed that there are plenty of people in the community, including the government and professionals in the penal field, who believe that offenders do not need (tertiary) education, especially those in sustainable programs that involve mainly hands-on tasks. Predictably, some in the general population may not understand the positive impact education can exert on offenders. However, some of the basic knowledge in social conventions taught through sustainable programs could be new to offenders, such as how to treat a plant as a living thing and why we have to care for the environment. Their knowledge and experience will be useful to the environment and society, even if they are in prison for life, because there are many ways that they can contribute through their participation in well-structured and well-organised sustainable programs in prison, as shown in the analysis in this thesis. Misconceptions and lack of understanding could make the public consider education and vocational training for offenders to be a waste of taxpayers’ money, particularly for long-term prisoners. They may doubt the value of the effort and time practitioners and scholars spend on this ‘less eligible’ group, as experienced by some of the interviewees. De-

labelling and Recognition by Significant or Respected Others does occur if the released are appreciated by their employers or teachers, or recognised by their family or probation officers as eligible people. Yet the reality is that these ideal circumstances may not emerge, even if the offender has transformed significantly. This may cause the offender to experience stress or other negative emotions, which could lead to (re)offending rather than desistance.

9.3.2 Alleviating Ingrained Socio-Cultural Beliefs

Individualism is well embedded into many Anglophone cultures that are adopting more sustainable programs in prison than other nations. Individual responsibility is one of the main attributes of individualism (Ho & Chiu 1994), entailing that ‘each citizen would have to take responsibility for the subsequent direction that his or her life took, rather than expect any assistance to this end from the state’ (Pratt & Eriksson 2013, p. 63) and that ‘individuals were responsible for their own journey through life, in prison as well as out of it, great or small, those best equipped to make this journey, and those least well equipped’ (Pratt & Eriksson 2013, p. 124). Under such a belief system, offenders are required to take all the responsibility for their offence/s and to be punished within the strict confines of the prison. The idea of individualism in fact contradicts the values underpinning environmental protection as it prioritises the ‘self’ over other people, species and nature (McNamee 2014). Learning to protect or love the environment is therefore a means to lead self-oriented people to concern themselves more with the needs of others instead of their own wants and goals because saving the environment requires collectivity and interdependence (McNamee 2014). Connecting with the community through TH programs or animal programs is thus essential to teach both community members and offenders collectivity and egalitarianism, which are the opposite of individualism.

Interviewee O3 asserted that sustainable programs are extremely valuable in transforming offenders into pro-social beings as well as allowing the world to witness their changes and learn about collectivity. Nonetheless, he believed that making the programs available to all offenders who wish to take part is impossible because of the political value attached to ‘tough on crime’ agendas:

‘I want to say yes [to making sustainable programs mandatory for all offenders] but it’s unrealistic. At the end of the day it’s a political decision ... If I put my Western Australian politician’s hat on, a lot of politicians will see the programs as soft and relaxing ... and the whole political kind of mantra in Australia is very much totally misunderstood, tough on crime [which hampers penal approaches that are considered ‘soft’, ‘nice’ or ‘kind’ as Maguire & Raynor (2006) raise].’
(Ex-Prison Officer, O3)

One possible approach to ameliorating this socio-political problem could be to enhance the social involvement and connection with the outside world through prison sustainable programs in order to widen the horizon of more community members. The social perceptions and constructions of a matter can exert a significant influence on government policies and determine its success (MacCready 2014). Prisons should therefore collaborate with NGOs and other community members to better manage the common issues faced by offenders, such as substance abuse and mental and physical health issues, so as to help sustainable program participants to transform themselves and understand the importance of remaining and how to remain on their desistance journey after release (Burkhead 2007; Palmer 1996). This will also assure the public, who is not directly involved in prison programs, that offenders are able to relinquish their bad habits and behaviour if proper assistance and education are provided.

The collaboration between the US-based NGO Planting Justice and the IGP in San Quentin State Prison is a valuable example in this regard, as it offers comprehensive programs and opportunities to both the incarcerated participants and in-need community members. The program participants are allowed to learn skills and knowledge in urban permaculture and organic food production (MacCready 2014), which then gives them the opportunity to work in Planting Justice’s Transform Your Yard program within a few days after release. Meanwhile, the organisation helps disadvantaged community groups to learn about economic, social and food justice, seamlessly bridging the prison program and the community and enabling both to comprehend and experience justice in diverse ways. This also allows both parties to understand the needs and difficulties of the other, thereby enhancing social cohesion and the psycho-social development of prisoners, in turn supporting their desistance (Bosch 1998; Littig & Griessler 2005).

9.4 How do Overconfidence and Overpromising Affect Desistance?

Confidence is crucial in the desistance journey as personal sustainability is comprised of various elements that can help an individual to sustain their life and growth, for example, by providing a livelihood to oneself and one's dependants, getting a job and receiving an education (Muasya 2013, p. 9; See Chapter 6). Further, improved self-perception and recognition by others can be cultivated when offenders have accomplished their assigned tasks. However, inevitably there are contradictions engendered by the benefits gained from sustainable programs in prison, especially in relation to confidence. Too much emphasis on offenders excelling in their work or study may not secure their desistance as their way of thinking may not shift to align with the mainstream social and cultural values. In addition, one's journey to desistance may be hampered by an unforeseen shift in mindset, such as being arrogant about one's achievements or being incapable of solving their own personal or social issues.

For instance, education or knowledge acquisition, especially at the tertiary level, can both benefit and hamper offenders at the same time. About half of the interviewees (E1, E3, E7, E8, O1–O3 and P2) recognised that higher education is sometimes in demand among offenders as they want to make good use of their time in prison to demonstrate their changes to their significant others or to boost their employability after release. Yet Interviewee E1, who had been involved in sustainable program design, operation and research, highlighted the potential risk of offenders growing more self-interested or arrogant because of their educational achievements. He worried that offenders who consider themselves to be superior to others for undertaking tertiary education through an education-focused sustainable program may not relinquish their self-centredness or develop empathy but instead become overly confident:

'Education can help the prisoners to become a fruitful citizen, to fulfil their citizenship role but it can also get them to look at their self-importance. It can get them to be a little bit narcissistic "Look at me, I'm doing my PhD" ... You can have all of the academic qualifications in place and you could still be an absolute asshole.' (Expert Interviewee, E1)

Interviewee E1 did acknowledge the need for educational elements within these programs but his concerns demonstrated that several latent problems cannot be resolved by a sustainable program that is focused on education but lacks any hands-on training. The three factors of desistance Maturation, Strong Pro-Social Relationships with Society and Negative Feelings about the Past might not be addressed by such a program, even after graduation. Like other educated non- incarcerated citizens, a well-educated incarcerated person can be knowledgeable and skilled but lack maturity. During their learning process, morality and cultural values may not be incorporated into their study. Problematic moral beliefs and a lack of empathy for their victims may persist; hence, Negative Feelings about the Past and desistance are not spontaneous outcomes of education. Positive Feelings about Self and Future, which could potentially be conducive to desistance, may instead evolve into arrogance and self-centredness, which do not play any role in promoting desistance. In this case, De-labelling and Recognition by Significant or Respected Others may not occur as well due to the offender's unfavourable attitudes, which can minimise any positive changes they have undergone and prevent socially respected others from acknowledging these changes (Meisenhelder 1977). A good sustainable program therefore requires both educational and practical elements to maximise participants' capacity to desist.

Interviewee O2, who used to operate TH programs, raised another critical issue of overpromising among offenders:

'sometimes prisoners do not have a neutral evaluation of themselves: whether they are changing, they have changed, or they are ready to return [to society]. They have no idea. Some of them think they are so ready because they've done great in the programs, and some are so scared to go back.' (Ex-Prison Officer, O2)

Interviewee O2 believed that overpromising oneself is quite common among offenders and that offenders who do so are overconfident. This can occur because they have excessive self-expectation or self-belief, or simply because they are too eager to demonstrate their personal transformation to their families or program facilitators. Offenders easily overcommit to themselves and their significant others in many ways,

such as by promising to change or to never offend again. However, these ‘turning point decisions’ are unlikely to last long enough for the offender’s desistance to be permanent (Maruna et al. 2004, p. 272) because they are usually made under extreme conditions, such as at the moment of apprehension or while serving their sentence, and are therefore shaped by negative emotions like desperation, frustration or stress. If such offenders return to the community to find they are not accepted and instead only face stigmatisation and exclusion, they tend to be less able to acquire self-respect and integration within the wider community, and then often return to their subcultural who are more likely to accept them, and even to crime (Braithwaite 1989). As Maruna (2001) argues, if offenders do not have a genuine belief in their own ability to change, and attribute their likelihood of transforming to luck or other chance elements, they will be less likely to desist. These offenders usually need the support and guidance of professionals and other third parties to either enhance the effects of positive reinforcement by others or prevent them from being overly ambitious or confident in pursuing a process of transformation, further highlighting the importance of boosting the desistance factor De-labelling and Recognition by Significant or Respected Others.

People who are inclined to define themselves by their undesirable past experiences or by their role as victims in life will be more likely to persist (Maruna 2001). Nonetheless, while gaining confidence in oneself is important for moving onwards and fostering a desistance lifestyle, program facilitators or prison officers need to help offenders to avoid overbuilding their confidence or promises as this is not simply a small personality issue. Otherwise, overpromising or overconfidence may facilitate arrogance or narcissism and create a huge gap between what the offender perceives they are achieving and what they are actually achieving, thus becoming hurdles to their successful reintegration and desistance due to the associated negative emotions (see Chapter 6).

9.5 How can Indigenous Offenders Benefit from Sustainable Programs?

The overrepresentation of Indigenous offenders is an enduring problem across Australia (Shepherd, Ogloff & Thomas 2016). Although this thesis does not intend to specifically explore the use of TH programs and animal programs among the Indigenous prison population, some interviewees strongly emphasised the positive outcomes observed among Indigenous participants in these programs, suggesting a new way to handle an

important area of modern penal issues. Indigenous over-representation and recidivism are sophisticated to solve. There are lots of rooted historical and structural issues, such as colonialism and inequality, contributed to this context (Cunneen & Tauri 2016). Nonetheless, these issues are not designed to be examined in this research. Instead, this section endeavours to raise the possibility of implementing sustainable programs to help improve the penal services towards Indigenous offenders and facilitate desistance among this isolated group in prison, in terms of reducing their idle time and encouraging them to involve in meaningful activities that may equip them with skills and a sense of respect, according to the interviewees' experiences and perspectives.

Besides benefiting non-Indigenous offenders, as discussed in section 8.1.4, a more welcoming and less stressful social environment created by sustainable programs could also bring benefits for Indigenous offenders, who are prone to be less interested or engaged in prison programs, as asserted by some of the interviewees. Interviewees O3 and E8, who used to work in prisons with huge proportions of Indigenous offenders, claimed that respecting Indigenous cultures and incorporating elements of these cultures into sustainable programs may relieve the huge gap between Indigenous offenders and the rest of the prison population, while also benefiting the outside community in the long term:

'In Australia, as you know, there is a significant Aboriginal population and you also know there is a significant disproportion of representation of Aboriginal people in prisons much more, the number is higher for women and that's appallingly higher for men but they are the least interested in programs ... We spent a lot of time on trying to understand the Indigenous culture and what we could do differently that would recognise their situation but also contribute to leading to a better citizen. So, for example, we introduced an educational program around [environmental] sustainability. I'm thinking that the Aboriginal culture is very spiritual but is also very connected with the Earth, the elements, so you get this whole spiritual culture where the elements and the earth are quite connected, so we developed the program. And we found this was working. We've got some expertise from some [Indigenous] people who were into sustainable practices. They were not very proactive at the start, but they did become more engaging

little by little ... They probably found us [program facilitators or prison staff] less “harmful” than before.’ (Ex-Prison Officer, O3)

‘I think trees are really important particularly to the Aboriginal people as there’s a lot of spiritual connections with trees and things like that. You take that away they can’t be made whole ... They just sit there for nothing. I know they [mostly] like art and bush. Some of them can do art in prison but hardly other green things. If we try to give them back some of the things they value, they connect to, perhaps they will be less sceptical, cynical to the prison, to the life, to all others.’ (Expert Interviewee, E8)

These interviewees’ experiences and knowledge of penal services has thus made them more aware of the need of Indigenous peoples to connect with nature and also revealed that these Indigenous needs are not looked after in most current circumstances. Dissatisfaction about the environment, the prison or one’s peers may obstruct one’s tendency towards desistance and encourage negative attitudes and behaviour such as withdrawal or a refusal to cooperate. To date, Indigenous knowledge and values are still not recognised, promoted or included in any way within the prison system. In 1992, the World Bank claimed that a huge proportion of Indigenous people around the world were living in poverty and provided with limited resources from their own governments. It further stated that Indigenous people tended to live in rural areas that relied significantly on natural resources, but they usually had little to no legal control over their traditional lands and resources. This has contributed to very limited engagement by Indigenous people in environment-related work, such as environmental conservation and protection. This remains a problem in the 21st century (Anand & Sen 2000; Jones 2014). In many countries, Indigenous people have a limited voice about their native land, and needless to say this is less so in prison. The actual exclusion of Indigenous people may reinforce their social or self-isolation and their unwillingness to engage with prison programs or other kinds of communication and interaction with non-Indigenous people, leaving many of them jobless during incarceration (Ryan et al. 2019).

It is likely that Indigenous offenders will be more vulnerable to these negativities because of their unfavourable life experiences, both before and during incarceration. To genuinely embrace Indigenous offenders in the desistance agenda, it is necessary to respect their

culture and include it in the design of sustainable programs. First, it is essential to understand that, even in prison, different groups of people may value and sustain the environment in different ways. Indigenous people, who are more overrepresented in the prison system than any other group, usually possess viewpoints and values in relation to the environment that differ from mainstream environmental value systems (Jones 2014). For instance, in American Indigenous cultures, mountains represent many significant legends and myths that help the people to understand and build their society and worldview; in Australia, some Indigenous groups possess special relationships with and deep understanding of different kinds of sea turtles. Furthermore, some Indigenous people tie their identities to the lands in which they live. They hence cultivate specific values and knowledge about protecting and preserving the natural environment and resources, based on their enduring and symbiotic relationship with the land (Jones 2014). This knowledge broadens their appreciation and understanding of the relationship between humans, non-human living things and the environment (Berkes 2008). Nonetheless, the unique interpretation of nature within Indigenous cultures tends to be neglected in the mainstream discussion of sustainability as it is highly spiritual and considered difficult for non-Indigenous people to understand (Jones 2014). Despite this, scholars insist on including Indigenous people at the table in discussions on sustainability because they have an advanced understanding of the interconnectedness of all living beings and the environment. It is believed that Indigenous-specific interpretation and knowledge about the environment allows Indigenous people to live sustainably and in harmony with their environment (Baker 1989; Jones 2014), which could benefit discussions of sustainability outside Indigenous communities if Indigenous representatives were included in these discussions.

Sustainable programs could therefore act as a bridge to (re)connect Indigenous offenders with the environment. Through participation in TH programs and animal programs, Indigenous prisoners, who are usually quieter and more isolated than their non-Indigenous counterparts, could be empowered to apply their values, knowledge and experiences in relation to the environment in order to create an Indigenous-friendly prison environment that supports transformation and desistance. Some research demonstrates that sustainable programs that are heavily focused on animals and plants are effective in ameliorating offenders' attitudes towards the environment and its

inhabitants, regardless of offender ethnicity, age and gender (Cammick, Waliczek & Zajicek 2002). Based on the interviewees' perspectives, sustainable programs can alter Indigenous offenders' perceptions of the social environment, allow them to become part of the mainstream and encourage them to be more engaged with their own transformation and desistance, as they receive greater inclusion and respect from prison staff and their non-Indigenous counterparts.

Interviewee O3 affirmed that simply allowing them to carry out their traditional ceremonies on a piece of grassland can make a huge difference to Indigenous offenders as they are able to regain a certain level of respect, especially for their culture, and some control over their life – both of which are fundamental to fostering personal sustainability and desistance (see Chapter 6).

Similar to non-Indigenous offenders, the Indigenous ones also need strong social support for reintegration with the presence of social justice, in particular to the inequality and injustice that they have been facing since historical time (also see Section 7.4). TH programs and animal programs are therefore two of the rare examples of prison programs that are suitable for helping all kinds of offenders to transform and desist. With a blend of Indigenous and non-Indigenous workmates and staff, these programs can recognise and incorporate different cultural beliefs and values while exploring or making use of the natural environment (Soderback, Soderstrom & Schalander 2004). The resultant improved relationship with the non-Indigenous community will help close the gap between Indigenous offenders and the rest of society, thus developing stronger pro-social connections between both sides and stressing the importance of a healthy social environment. In addition to creating a safer prison, handling these cultural differences with care, equity and respect will encourage Indigenous prison populations to take part in sustainable prison programs instead of idling away their time. This isolated group may then have a chance to integrate with the mainstream and cultivate a pro-social attitude as they come to see themselves as a part of that community, further benefiting the overall prison environment by reducing scepticism and misunderstanding and consolidating the pro-social relationships that support desistance. Further research should be undertaken to investigate the use of sustainable programs and the impact on promoting Indigenous offender desistance because this is a very important issue for the wellbeing, harmony and

development of all Australian communities and this should not be a sole responsibility of the Indigenous community.

9.6 What are the Pragmatic Issues that Sustainable Programs cannot Help Offenders to Solve?

Although sustainable programs are effective in facilitating desistance in a range of areas, there are certain issues that offenders frequently face in the outside world for which neither prison life nor sustainable programs prepare offenders. From the interviewees' perspectives, these issues fall into two main categories: handling relationships and facing reality.

9.6.1 Handling Social Relationships

The boundaries between offenders, staff and community program facilitators are important but the roles of these helpers, especially prison staff, can be challenging and ambiguous in terms of the type of support participating offenders need to transform. In order to facilitate desistance, it is better that prison staff present themselves as supporters rather than providers of programs or services (McNeill 2006). Yet, in practice, on the one hand, staff have to fulfil organisational needs and ensure security as well as provide fair treatment to all offenders; and on the other hand, some staff are also responsible for assisting in or directly running the TH program or animal program. This may lead to a conflict between roles, and therefore professional training is needed in this situation to ensure staff members have the skills required establish and maintain the appropriate professional relationships for program implementation and practice. The requirement to meet organisational needs usually outweighs the requirement for skills development in this area, which, together with the potential for conflict between staff roles, can impede the development of a supportive relationship between prison staff and offenders in sustainable programs (Maguire & Raynor 2006). Therefore, many prisons distinguish between the roles and responsibilities of custodial and non-custodial staff in order to avoid such a conflict. Non-custodial staff are treated as 'care bears' by offenders, as they are perceived to care more about offenders than other staff and to genuinely want to help them, as mentioned by Interviewee O2. Such 'care' may then lead to closer connections between offenders and non-custodial staff, particularly those who run the programs and work with the participating offenders every day.

However, it is not unusual for offenders to lack the experience or skills needed to manage their own affection for prison staff or program facilitators. Interviewee O1 said that his prison provided staff with no training on how to manage relationships with offenders, beyond the initial orientation when a staff member begins their job:

‘I think because we have an environment of acceptance, they [offenders] tend to mistake that for affection. So a lot of the female teachers report prisoners telling them that they love them, they want the teacher be the girlfriend ... I think it’s okay to have the feelings. I think it wouldn’t be natural if they didn’t have the feelings. It’s about how they express their feelings; they need to understand what’s the suitable expression.’ (Ex-Prison Officer, O1)

Interviewee O1’s experiences and concerns highlight an important but usually tabooed topic in relation to prisons: sexual relationships between offenders and staff. It is not at all surprising to see students developing affection for their teachers or instructors, even in the outside world, so offenders should not be considered abnormal or immoral in this sense. The critical point is how they manage their feelings and behaviour. A high level of self-control and low impulsivity are crucial elements of desistance (Gottfredson & Hirschi 1990). Offenders in this situation need to appreciate the roles of staff and program facilitators and be mindful of the ways they might suppress or divert their affections. This may help to improve their capacity for self-control, which is indispensable to desistance, by reducing the tendency towards instant gratification (see Chapter 6). Indeed, these skills and knowledge are vital for all offenders because handling one’s affection towards someone of the opposite or same sex is an important social skill for everyone, including prison staff and other people who work with offenders. Knowledge and skills in this area need to be taught in prison so that all stakeholders can understand their roles and the associated boundaries, as well as how to control their own feelings and respect the feelings of others. Yet these skills are unlikely to be imparted in any sustainable program or any orientation course for staff and other program facilitators. A separate course should therefore be developed that equips offenders with the techniques for handling intimate relationships and enhancing their own self-control. And prison staff and community program facilitators also require specific

training on how to manage relationships with offenders. It is important that all program teachers need to develop skills in this area to prevent issues arising in relation to staff-offender relations since this is not solely the responsibility of offenders.

Other than their relationships with prison staff and program facilitators, offenders may encounter problems or conflicts in their relationships with their family and friends, particularly after release. Interviewees E6 and O5 reported that program participants would sometimes come to them to discuss their future and many were scared about moving on, mainly because they were anxious about their relationships and social connections with others:

‘many [prison] residents will talk about being returned to an environment where drug use and criminal conduct is acceptable and at times expected. They find it easy to remain drug free and healthy in prison, but upon release they find it very difficult because that is what they are returning to and they are returning to the same community very likely with the same group of peers.’ (Expert Interviewee, E6)

‘a lot of people didn’t want to get back to the environment they were in because they didn’t feel like they were strong enough to say no and avoid those crimes again. A lot of people are scared that they didn’t have anywhere to go, or that they didn’t want to leave [the prison]. A lot of people made good friends in the prison but got a lot of bad friends outside.’ (Ex-Prison Officer, O5)

These comments reflect that many offenders have unstable, unhealthy or illegitimate lifestyles and relationships before their incarceration, which partly or chiefly contribute to their offending and imprisonment. It is therefore normal that such offenders might worry about returning to the community as they are not confident about being able to stand firm in the face of those old lives and networks after release. The desistance literature suggests that strong attachments, especially via marriage and employment, can lead to desistance (Healy 2010; Sampson & Laub 1993). The emotional support and pro-social modelling provided by these connections can contribute to positive changes among released offenders. Nevertheless, while informal social control is important, the quality of an offender’s relationship with social institutions is more influential (Ezell 2015;

Sampson & Laub 1993) in supporting desistance. Marriage is not necessarily conducive to desistance if the relationship is unhealthy, such as exploitative and manipulative. Such relationships can be harmful to desistance because the offender's self-identity will be challenged. If a relationship is abusive, the released offender may be forced into a lifestyle that is mentally unhealthy or involves illegal activity. Any positive changes they have made in prison will then be unsustainable as the social environment is not supportive of their long-term desistance. When one's mental or physical health is not stable or strong, negative emotions and thoughts can more easily overwhelm the pro-social mindset and behaviour (see Chapter 6). Additionally, if one's relationship is not stable, or involves frequent changes of partner, or had started too early when the individual was still young, the quality of social attachment decreases, hence providing less social capital and increasing chances of offending. Similarly, Farrall, Godfrey, and Cox (2009) argue that the meaning of employment to the released and their journey of desistance is contingent on the nature of the institution and its social structure. If employment is an unpleasant experience post release and offers an undesirable working atmosphere, negative thoughts and behaviour may emerge. For instance, perceiving discrimination by colleagues, receiving unfair wages and lacking adequate support in the workplace can hinder released offenders from staying on the path to desistance because life in the real world is too difficult to handle, and the post-release support provided to ex-prisoners is usually limited (Burnett 2000). Antipathy and cynicism towards society may then be aroused, thus suppressing the pro-social thoughts and behaviour that enable desistance.

Another significant issue concerns how offenders define and recognise their 'respectable and significant others'. An indifferent family member, abusive partner or gangster friend is not a desirable attachment that offenders should strengthen. These are issues that can hardly be addressed by a TH program or animal program. Therefore, to prevent these problems from obstructing offenders' desistance, more dedicated and enduring post-release services are needed for all released offenders. Interviewee O5 shared his method for helping offenders in his program, though he found that the help he was able to provide in this context was very limited:

'I will always try to recommend that they find a good support network, but with so many prisoners and resources stretched they are often unable to find help ...

There needs to be a through-care model that allows the person helping in prison to continue to help upon release. The family could be involved so that they are aware of what the prisoner's goals are.' (Ex-Prison Officer, O5)

The other four ex-prison officers interviewed in this research also asserted that they had recognised offenders' fears about the future and tried to help connect them with the transition team in prison or other contacts in the outside community who could assist them in their search for housing, social support services and employment. Yet, many of the existing post-release services only offer assistance for a relatively short period of time, usually three months, which is not enough for offenders who have served long sentences. Moreover, most of the expert and ex-prison officer interviewees argued that the available post-release resources are extremely scarce, and that many of their previous program participants did not know where or how to access post-release services or reported that these services were too general or of no use. One of the main issues reported by Interviewee P4 was that he found the post-release service staff to be not as supportive as the prison staff and program facilitators with whom he had worked. This could be attributed to the lack of any long-term relationship or rapport between offenders and service staff, as was built in prison between offenders and prison staff or program facilitators. He felt that his needs were not clearly understood by post-release service staff and that the period for which such support was available was too limited. Hence, any in-depth understanding or supportive relationship could not be cultivated and Interviewee P4 felt he had to be largely self-reliant in pursuing his desistance journey.

In the reviewed literature, it is found that the quality of post-release services or support provided by sustainable programs varies among prisons, states and countries. Some programs in the US offer longer and more intensive transition and supportive services to sustainable program participants, such as the SPP and IGP, but most of the interviewees in this research, who are Australian-based, found the existing sustainable programs and post-release services to be ineffective or inefficient in helping the released to cope with any social relationship problems, which have a significant influence on the success of their desistance. Sustainable programs could cooperate with other prison programs to facilitate offenders' understanding of how to maintain healthy relationships; they could also work with post-release services to help offenders manage any other problems that

emerge after release, both relationship-related and non-relationship-related. Such support and assistance would enable offenders to sustain the positive changes they have undergone in prison and to better manage stress and other negative emotions or circumstances so that they will not return to offending and will remain on the road to desistance.

9.6.2 Employment and Life challenges

Improved post-release services would not only benefit offenders' social networking and intimate relationships, but would also help them with employment and other living problems. Interviewee O3 described a previous TH program participant who had experienced difficulties with working and living after release. This offender felt incapable of handling the problems they faced after release because how to manage such problems had not been covered by the program:

'I've heard from a very high-profile parolee who presented some issues in the workplace ... that the staff and some managers seeing him being difficult and awkward ... They were thinking, "Should we be taking disciplinary action?" and I have to say to them, "Hang on, this person is institutionalised" ... So his behaviour in the workplace is because he is still acting like he is in prison ... [Another problem is that] he's got moved into his own flat and now he says, "I'm so isolated, I have no friends here". So his behaviour in the workplace is because he is still acting like he is in prison and he is telling people what they think they want to hear ... I think we underestimate the difficulties that some prisoners have when they get released, especially long-term prisoners.' (Ex-Prison Officer, O3)

As interviewee O3 used to work closely with offenders, he could see the impact of institutionalisation on the released, which is barely addressed and certainly not eliminated by any prison programs, even sustainable programs, and including his program, which offered offenders little opportunity to connect with the outside community. Being able to work is not equivalent to being able to live. The knowledge and understanding of offenders and their experiences differ significantly between people in the outside world and those who work or volunteer in prison and therefore have direct contact with offenders. The general public often has no idea about institutionalisation and the needs of offenders, including in relation to desistance, and this ignorance may

discourage the released from moving on or feeling accepted by the community. This may mean that the pro-social world presents offenders with more challenges and difficulties than the anti-social world or deviant subcultural groups, thereby damaging the development of the desistance factors Strong Pro-Social Relationships with Society and Positive Feelings about Self and Future.

The effects of institutionalisation on offenders, especially long-term offenders, in terms of hindering a healthy and normal lifestyle cannot be underestimated. Offenders require more support than is currently available to allow them to overcome these impacts on their post-release life. Possessing the skills to work does not equate to having the strategies to leave behind the impacts of institutionalisation. How to live, and not merely survive, in the outside world is not usually taught through sustainable programs. Offenders may gain social skills while interacting with their workmates in prison but these may not be sufficient to equip them to overcome real-life challenges or to sustain a desistance lifestyle after release. The skills learnt in such programs may not help the released to reconnect with the working environment or culture in the outside world or to relinquish their sense of shame and resolve family issues. Furthermore, simply gaining new skills and knowledge may not be conducive to transforming an individual's attitude towards morality, deviance and crime. Well-educated and highly skilled people may behave poorly or engage in criminal activity without being apprehended. Hence, a deeper level of advancement that addresses moral, cognitive and behavioural issues is required to foster personal sustainability and in turn desistance.

Therefore, a sole focus on enhancing offenders' employability may overlook a precious opportunity to rehabilitate offenders (MacCready 2014). It is essential that offenders, while in prison, develop the skills needed to handle the unpredictable difficulties and challenges that may arise in the outside world after release, such as workplace conflict or arguments with strangers, which in turn will discourage them from reoffending and furnish them with the skills and confidence to achieve their goals and establish a pro-social life. Education cannot teach them everything; and being employed after release cannot guarantee a satisfactory and law-abiding life. As discussed in the previous section, sustainable programs need to collaborate with other prison programs to equip offenders with the coping skills needed to manage real-life issues instead of only the issues faced

in prison, and with the ability to communicate with people who have limited experience and understanding of prisons and offenders (Burkhead 2007; Palmer 1996). As the situations of individual offenders vary and cannot all be addressed within a single prison program, the role played by post-release services is vital in guiding the released to cope with the negative feelings that could derail their commitment to desistance. These services should certainly be provided for the long term; and it would be ideal if they were available for as long as offenders needed them. This would ensure that the released feel supported and are not steered away from desistance because of life's challenges.

By way of summary at this point, sustainable programs like TH programs and animal programs offer not only connection to the natural environment but also a more peaceful and safer prison environment for offenders and staff alike, while also providing participants with skills and benefits in diverse ways that promote their desistance, as discussed in Chapters 6, 7 and 8. Nonetheless, according to existing practices and the interviewees' experiences, there is still significant room to improve the programs, including but not limited to program application, program, structure, staff training and connections with the outside communities. A clear structure demonstrating how desistance can be better facilitated is necessary to ensure the best outcomes from sustainable programs. This chapter has thus introduced the schema presented in Figure 9.1 to portray the important role of personal sustainability and social sustainability in the process of cultivating desistance, as the benefits of these two aspects of sustainability also have a significant influence on the growth of economic sustainability and environmental sustainability. Although the latter two types of sustainability are more subsidiary in nature, they are also requisite for desistance facilitation because they involve different kinds of learning and skills development that also support desistance, such as planning for the future and considering the welfare of other people and living beings.

Beyond the formulation of programs, the voluntariness of participation, the extent of social involvement, the risks of being overconfident/overpromising and the challenges posed by life in the outside world, there are four major potential obstacles to desistance, according to the interviewees in this research. It is suggested that even though voluntary participation in programs is important in the prison context, complete voluntariness may

not always be appropriate as some offenders would feel more encouraged or confident if prison staff recommended or selected them for participation in a sustainable program. There is also a risk of overconfidence and overpromising, which may hinder the development of desistance because undesirable attitudes or behaviour may arise as a result. Engaging the broader society as much as possible through sustainable programs will improve the public's appreciation of the work of offenders, of offender transformation and of offenders' needs in relation to desistance, thereby minimising one of the chief obstructions to expanding the use of innovative prison programs like TH programs and animal programs. To achieve this, cooperation with local communities and organisations is a must to strengthen understanding and connections among offenders and the outside world. Not only in prison programs, collaborations should also be extended to post-release services that help the released to learn how to deal with real-life challenges with their own effort by using a legal means, sustaining their desistance lifestyle in the face of such difficulties and practising the life skills they have acquired in prison. Since there are many real-life crises for which prisoners cannot be prepared by participation in prison programs, such as problems related to work or relationships, released offenders require more support than is currently provided to ensure they remain on the desistance path rather than losing everything they have gained from sustainable programs and returning to crime during the transitional period. Another unexpected benefit of sustainable programs is the potentials they have on improving the problem of low engagement by Indigenous offenders in prison programs as the TH programs and animal programs are able to offer a more culturally sensitive environment to demonstrate respect to Indigenous culture.

All in all, no single program, service or shift in behaviour or attitude can change an offender entirely or lead directly to their desistance. Rather, desistance is dependent on the efforts of offenders, prison staff, communities and governments. Sustainable programs have opened up a new way to facilitate desistance. If all these stakeholders work closely together to improve public attitudes towards offenders, allocate more resources to relevant organisations, provide better services and opportunities to incarcerated and released offenders, widen the application of programs and, more importantly, systematically structure sustainable programs as per the schema presented in Figure 9.1, offenders' pathways to desistance will be far smoother and less treacherous.

Chapter 10 Conclusion

As has been discussed in this thesis, exposure to the natural environment helps people to reflect, restore and focus, either in social or penal settings (see examples Holmes 2017; MacCready 2014; Moran, Jewkes & Turner 2016). Among the existing literature, many have found that offenders who stayed in an environment with natural views possessed fewer stress-related symptoms and displayed less problematic behaviour, in contrast to those whose cells face prison buildings only. Furthermore, those with natural views in prisons also had fewer health complaints than those facing prison courtyards (Diette et al. 2003; Huelat 2008; Molleman 2011; Moore 1981; West 1985). However, merely exposing offenders to nature is not necessarily conducive to permanent desistance. Putting offenders into a garden or building a few trees around their cells, although it reduces offenders' and prison staff's stress and decreases the chances of prison chaos, it cannot guarantee offender transformation. If offenders cannot grow or learn to transform during the exposure, they may struggle to survive after release because such a short period of peace is unable to offer them skills to deal with the troubles and turmoil in life (Rice & Lremy 1998) that may lead to (re)offending. All those personal, social or economic difficulties may hamper their capabilities or psychological wellbeing to remain on the desistance path. Hence, there needs to be enough training and education available while exposing an offender to the natural environment. Sustainable programs, which could offer 'a form of nature-based therapy to prisoners under the guidance of trained professionals' (Van der Linden 2015, p. 460) and integrate greening activities with vocational training and equip inmates with reasonable social manners by cooperating with others, have thus built the foundation of this thesis. Two of the leading exemplars, therapeutic horticulture (TH) programs and animal programs, have been examined across the five key factors of desistance that I identified from the desk review of a wide range of literature in order to investigate the impact of sustainable programs on facilitating desistance in prison.

This research has shown that no sole event on its own, neither social attachment, self-motivation nor a humane prison environment, could result directly in desistance. Various

aspects of development are needed to be reinforced so that more subtle relationships between sustainable programs and desistance can be illustrated. I have amended the Three-Legged Sustainability Stool to frame the thematic analysis of this study, which then helps to test the influence of each theme on each factor of desistance based on findings of the conducted interviews. The four main themes of sustainability—personal, social, environmental and economic—were developed and examined in the first three analysis chapters (Chapters 6–8). The benefits of each theme are mapped across the five key factors of desistance.

Chapters 6–8 reported the mapping outcomes and corresponding explanations on whether each themed benefit can positively affect desistance. From the analytical results, personal sustainability and social sustainability have more significant roles to play in promoting desistance among incarcerated participants of TH programs and animal programs. Personal benefits were demonstrated to help enhance four of the five key factors of desistance (except Strong Pro-Social Relationships with Society), while social benefits boost three of the desistance factors (besides Negative Feelings about the Past, and Maturation). These two aspects come together to supplement the weaknesses of each other in terms of comprehensively facilitating desistance. The environmental and economic aspects brought by TH programs and animal programs, which are the least explored topics amongst the seventeen interviewees, were found to have a rather complementary position in promoting desistance. Although three of the four environmental benefits can boost four of the desistance factors (except Negative Feelings about the Past), the analysis reveals that the impact of each environmental benefit marginally touches the base of facilitating desistance and is not as intense as the personal and social aspects. Furthermore, just one of the four economic benefits can help improve two key factors (which are Positive Feelings about Self and Future, and Maturation), portraying participants of sustainable programs as less likely to desist due to the development of economic sustainability. Despite the relatively weak influence on reinforcing desistance, environmental sustainability and economic sustainability still contribute to offender transformation by providing a special opportunity or medium for offenders to learn, grow and normalise, which is unlikely to be offered by traditional rehabilitation programs.

Figure 9.1 introduced in the discussion and recommendations chapter (Chapter 9) outlines how an effective sustainable program could be structured in future in order to maximise the positive impact on desistance. It indicates that personal sustainability and social sustainability need to be first developed and well sustained before environmental sustainability and economic sustainability are strengthened. This diagram may be adopted as a reference for future organisations and evolution of prison programs as well as being used as a guide for operating programs involving nature, plants and animals.

Chapter 9 further explored possible ameliorations on implementing sustainable programs in prison by looking at the inadequacies of existing TH programs and animal programs according to interviewees' experiences. Five key issues have been raised around how problems and difficulties that may hamper offenders from growing pro-socially or restrict sustainable programs from expanding can be mitigated, how the programs can solve issues that traditional programs cannot and what challenges that sustainable programs are unable to address in offenders' lives. Firstly, voluntary participation in sustainable programs is crucial to avoid coercion and other subsequent undesirable attitudes and behaviour from emerging; hence making the programs mandatory to all offenders is not encouraged. Nonetheless, prison staff recommending offenders take part in the programs may result in unpredictable positive outcomes. Complete voluntariness or preparedness for participation may not always be suitable or necessary because some offenders may never feel competent or prepared to take the job. Second, there are a range of societal restrictions imposed on the operations and expansion of sustainable programs, including prejudice towards offenders receiving education and vocational training and the ingrained socio-culture beliefs about 'tough on crime' that oppose innovations in prison. These negative impressions towards offenders and their needs can be ameliorated by increasing community involvement in sustainable prison programs, thus removing public ignorance and bias that may limit sustainable programs and desistance from being cultivated. In addition, precautions are also needed to avoid offenders turning overconfident or overpromising the programs. Although confidence is vital in developing personal sustainability, excessive confidence or promises made around their transformation may steer offenders away from becoming a pro-social desister. These are the three matters that prison management have to take into account while assisting offenders on their desisting journeys.

One astonishing merit of sustainable programs is the significant positive impact on changing Indigenous offenders' experiences of prison services and lives. Since TH programs and animal programs make use of plants and animals in nature to maximise offender transformation and desistance, this notion resonates with Indigenous culture, which connects with their natural habitats and non-human inhabitants. Implementing sustainable programs and welcoming Indigenous offenders to participate stimulate respect towards Indigenous culture and its values, can help to minimise the population's distrust towards their non-Indigenous counterparts and also encourage their participation rates. In contrast, one enduring problem that can neither be solved by traditional rehabilitation programs nor sustainable programs is real-life struggles or disputes which largely relate to social relationships and institutionalisation. There could be miscellaneous kinds of problems that they cannot handle alone, such as affection towards prison officers or program facilitators (though not abnormal but forbidden in prison), incapability of resisting their anti-social families or friends and the institutionalisation effect on their daily functioning or working performance. Continuous post-release services are therefore of the same importance as in-prison training to help the released not to return to the offending cycles. Learning to cope with difficulties, to sustain their pro-social changes built in prison, and to desist permanently is a long process but this should not be a lonely path. Services like transitional support, resettlement assistance and especially social support networking are indispensable to help the released reintegrate back into their communities and keep them in the desisting pathway.

To conclude this thesis, I would quote the comments of one director of the SPP who asserts that integrating science into offenders' everyday work is a promising process for offenders to grow:

Science...is about procedural order, point A to point B, with every step measured and marked for others to check and follow. And when the focus of that work is a creature that undergoes a profound metamorphosis from egg to tadpole to adult, the lesson is also one about the possibilities of change. In a prison... that is a big deal (a professor of ecology at Evergreen State College in Olympia and co-director of the Sustainability in Prisons Project, quoted in Johnson 2012).

Science, which requires precise procedures to prove a hypothesis, or nurture a plant or animal, can be a metaphor for offenders' transformation. From improving self-perceptions and attitudes towards the future to gaining recognition from the community, offenders here come to think back and encounter their wrongdoings. Desistance is a continuous process, gradually leading an offender towards a crime-free lifestyle. It is not simply a one-step goal that can be achieved immediately after release. Introducing science in prisons teaches the incarcerated participants that there is no fast track to success. The Greek philosopher Epictetus suggests that 'men are not disturbed by events but by their perception of events' (quoted in Burkhead 2007, p. 83). Consequently, changing perceptions on oneself and dealing with the past step-by-step would affect how offenders see themselves and the world differently. They can thereby turn away from offending when they look back to what they have lost in the past because of the offence. When the cost of operating the programs is low but the benefits are significant and comprehensive, it is well worth for governments, politicians and communities to invest in evidence-based prison programs such as the ones proposed here. The findings of this study are not only suitable for Australian society, but also instrumental to other countries that are determined to create change in their penal systems and community safety with the use of sustainable programs to transform offenders.

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Appendix A: Consent Form

CONSENT FORM

Project: Prisons, sustainability and desistance: Exploring the benefits of therapeutic horticulture programs and animal programs in carceral settings

Chief Investigator: Dr Anna Eriksson

I have been asked to take part in the Monash University research project specified above. I have read and understood the Explanatory Statement and I hereby consent to participate in this project.

I consent to the following:	Yes	No
Taking part in the research	<input type="checkbox"/>	<input type="checkbox"/>
Audio recording during the interview	<input type="checkbox"/>	<input type="checkbox"/>

Name of Participant

Participant's Signature

Date

Appendix B: Explanatory Statement – Previous Program Participants

EXPLANATORY STATEMENT

(Previous Program Participants)

Project: Prisons, sustainability and desistance: Exploring the benefits of therapeutic horticulture programs and animal programs in carceral settings

Ms Daphne Choi

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Dr Anna Eriksson

Associate Professor

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I am interested in investigating the relationship between promoting sustainability and desistance as well as the possible benefits and issues that can be brought by implementing sustainable praxis in Australia's prisons. To this aim, I am exploring how two areas of sustainable practices, horticulture programs and animal programs, can help to transform offenders and promote desistance. Individuals' mental and behavioural transformation as well as the corresponding impact on communities and environments will also be explored in this research.

You are invited to take part in this study. Please read this Explanatory Statement in full before deciding whether or not to participate in this research. If you would like further information regarding any aspect of this project, you are encouraged to contact the researchers via the phone numbers or email addresses listed above.

What does the research involve?

The main aim of this research is to explore your previous experiences in participating in horticulture programs/animal programs in the prison and your perception of the programs. Your contribution will help us understand how these programs can help residents to transform, maintain peace in prison and stay away from crime after release. This may also help to advance our penal system and enrich the prison life of residents as well as to reduce recidivism and crime rate in long run. During the interview, you will be answering a set of questions related to your personal changes, rehabilitation process and life after release. Each interview will take approximately 30-45 minutes and will take place either at Monash University or an ACSO location. You can decide the most suitable time.

Why were you chosen for this research?

As a previous user of the prison service, your personal experience in prison is very valuable in letting us understand how horticulture programs/animal programs are being delivered, to what extent they have changed you, and their impact, if any, on your desisting journey. Your information allows us to deepen our understanding in prison service development and gives us a notion of proposed suggestions to current services and facilities. Your contact details could be either provided by Australian Community Support Organisation (ACSO) or people who know you at ACSO after you have agreed to join the study or you have expressed your interest to take part.

Consenting to participate in the project and withdrawing from the research

Before the interview begins, you will have to give your written consent to participate in this research. You may decide to what extent you would like to consent to take part by filling out the consent form. If you do not consent to the use of audio recording, your script will only be recorded manually. You could decide not to join the study after reading this explanatory statement. You have the right to refuse to answer any question that you find uncomfortable or withdraw from the interview at any stage without any reason or repercussion. If you want to withdraw from the study after the interview, you will need to contact the researcher team within two weeks. After two weeks, all identifiable data will be removed and analysis will start, making withdrawal impossible.

Possible benefits and risks to participants

This study aims to improve our prison services by exploring what is actually needed to be developed in prison in order to help residents to transform and sustain a desisting lifestyle. Your data could assist in future delivery of rehabilitation services in prisons which offer other prisoners a chance to attend more structured and effective rehabilitative programs. These are also beneficial to the general public as we could cultivate more practical means to solve the problem of high recidivism, thus helping to reduce the amount of crimes in our society.

If you at any time feel uncomfortable or does not want to answer any more questions, you can ask for a break or withdraw from the interview in this situation.

Services on offer if adversely affected

We have provided a list of additional services at the bottom of this document for your information if you experience any negative outcomes from this research process.

Confidentiality

To protect your identity and data from being identified, you will be assigned a random number after the interview. If some of your words are directly quoted in the report, your name will never be shown, instead, the number assigned to you may be used. The research findings will be reported in a doctoral thesis which may be published upon

completion. The research team and examiners will be the chief parties who are going to read the findings. If the thesis has been published as a book chapter or journal article, or has been presented in a conference, other academics or students could have the chance to read through the findings, and your identity will be protected in all such publications.

Storage of data

All data will be transferred to and stored in the Monash System so that no one can access to the information without authorization of the Chief Investigator. Only computers that can access to the Monash System will be used so as to avoid copying data from the System to portable disk which might lead to disclosure of interviewees' personal information. Data of this research will be kept indefinitely in an encrypted disk after publication, unless particular participants strongly require disposal of their data.

Results

Results will be available when this research project is completed. A copy of the whole thesis will be sent to ACSO. You may contact ACSO or the researchers indicated on this explanatory statement for the full report.

Complaints

Should you have any concerns or complaints about the conduct of the project, you are welcome to contact the Executive Officer, Monash University Human Research Ethics (MUHREC):

Executive Officer

Monash University Human Research Ethics Committee

(MUHREC) Room 111, Chancellery Building E,

24 Sports Walk, Clayton

Campus Research Office

Monash University VIC 3800

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Thank you,

Ms Daphne Choi

Dr Anna Eriksson

Support Services

Better Health Channel

Website <https://www.betterhealth.vic.gov.au/servicesandsupport/mental-health-services>

Care in Mind

Call 1300 096 269

Website <https://careinmind.com.au/>

Counselling Help Line

Melbourne Call 03 9530

5618

Website <https://www.counsellinghelplinemelb.com.au/>

LifeWorks

Call 1300 543 396

Website <https://lifeworks.com.au/services/api>

Appendix C: Explanatory Statement – Ex-Prison Officers

EXPLANATORY STATEMENT

(Ex-Prison Officers)

Project: Prisons, sustainability and desistance: Exploring the benefits of therapeutic horticulture programs and animal programs in carceral settings

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I am interested in how different prison environments effect prisoner behaviour and desistance. To this aim, I am exploring how programs with a restorative justice focus operates in different environments and what their outcomes might be. Thirdly, there is a move to make prisons greener and more sustainable. This is also something I will explore throughout this project, and in particular how such different environment impacts on both staff and inmates.

You are invited to take part in this study. Please read this Explanatory Statement in full before deciding whether or not to participate in this research. If you would like further information regarding any aspect of this project, you are encouraged to contact the researchers via the phone numbers or email addresses listed above.

What does the research involve?

The main aim of this research is to explore your perception of the process of rehabilitation in the prison and the prison environment. Your contribution will help us understand how the prisons implement rehabilitative programmes to help residents to transform, maintain peace in prison and stay away from crime after release. This may also help to advance

our penal system and enrich the prison life of residents as well as to reduce recidivism and crime rate in long run. During the interview, you will be answering a set of questions related to the rehabilitative programmes, the prison environment and changes of residents that you are aware of. Each interview will take approximately 30 minutes. You can decide the most suitable time for the interview.

Why were you chosen for this research?

As a practitioner of the prison service, your working experience in prison is more than valuable to let us comprehend how rehabilitative programmes are being delivered, to what extent they have changed the residents and the impact of the environment on them. Your information allows us to deepen our understanding in prison service development and gives us a notion of proposed suggestions to current services and facilities. Your contact details will not be provided by the management even if they have suggested you to the study. For all circumstances, we will only obtain your contact details from you.

Consenting to participate in the project and withdrawing from the research

Before the interview begins, you will have to give your written consent to participate in this research. You may decide to what extent you would like to consent to take part by filling the consent form. You could decide not to join the study after reading this explanatory statement. You have the right to refuse to answer any question that you find uncomfortable or withdraw from the interview at any stage without any reason or repercussion. If you want to withdraw from the study after the interview, you will need to contact the research team within two weeks. After two weeks, all identifiable data will be removed and analysis will start, making withdrawal impossible.

Possible benefits and risks to participants

This study is able to better our penal system by exploring what is actually functioning well in the prisons and what in fact helps prison residents to change or rehabilitate themselves. Your data could assist in future delivery of rehabilitation services in prisons which offer prison residents a chance to attend more structured and effective rehabilitative programmes. These are also beneficial to the general public as we could cultivate more practical means to solve the problem of high recidivism, thus helping to reduce the amount of crimes in our society.

There is very limited extent of risk from this interview. The most probable one is emotional fluctuation when discussing about your working experiences in prison. Negative emotions such as anger, sorrow and shame may arouse. You can ask for a break or withdraw from the interview in this situation.

Services on offer if adversely

If you have any discomfort after the interview and need help, you may contact the prison counselling service for assistance.

Confidentiality

To protect your identity and data from being identified according to the sequence of participation, you will be assigned a number randomly after the interview. If some of your words are directly quoted in the report, your name will never be shown, instead, the number assigned to you may be used. The research findings will be reported in a doctoral thesis which may be published upon completion. The research team and examiners will be the chief parties who are going to read the findings. If the thesis has been published as a book chapter or journal article, or has been presented in a conference, other academics or students could have the chance to read through the findings either.

Storage of data

All data will be transferred to and stored in the Monash System so that no one can access to the information without authorization of the Chief Investigator. Only computers that can access to the Monash System will be used so as to avoid copying data from the System to portable disk which might lead to disclosure of interviewees' personal information. Data of this research will be kept indefinitely in an encrypted disk even after publication, unless particular participants strongly require disposal of their data.

Results

Results will be available when this research project is completed. A copy of the whole thesis will be sent to the prison. You may contact the management or the researchers indicated on this explanatory statement for the full report.

Complaints

Should you have any concerns or complaints about the conduct of the project, you are welcome to contact the Executive Officer, Monash University Human Research Ethics (MUHREC):

Executive Officer

Monash University Human Research Ethics Committee

(MUHREC) Room 111, Chancellery Building E,

24 Sports Walk, Clayton

Campus Research Office

Monash University VIC 3800

Tel: +61 3 9905 2052 Email: muhrec@monash.edu Fax: +61 3 9905 3831

Thank you,

Ms Daphne Choi

Dr Anna Eriksson

Appendix D: Explanatory Statement – Expert Interviewees

EXPLANATORY STATEMENT

(Expert Interviewees)

Project: Prisons, sustainability and desistance: Exploring the benefits of therapeutic horticulture programs and animal programs in carceral settings

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This project explores three inter-related themes: (1) how different prison environments effect prisoner behaviour and desistance; (2) how programs with a restorative justice focus operates in different environments and what their outcomes might be; and (3) thirdly, there are moves to make prisons greener and more sustainable (i.e. including but not limited to more initiatives of planting, saving energy, exposing to nature and promoting restoration and healing); this project explores how such different environment impacts on both staff and inmates.

You are warmly invited to take part in this study. Please read this Explanatory Statement in full before deciding whether or not to participate in this research. If you would like further information regarding any aspect of this project, you are encouraged to contact the researchers via the phone numbers or email addresses listed above.

What does the research involve?

Data collection consists of a semi-structured interview that takes between 30 and 60 minutes. The main aim of this research is to explore your perception of the process of

rehabilitation in the prison and the prison environment. Your contribution will help us understand how the prisons implement rehabilitative programs that promote desistance. During the interview, you will be answering a set of questions related to the rehabilitative programs, the prison environment and changes to residents that you are aware of. Together we will decide on the most appropriate time and place for the interview.

Why were you chosen for this research?

As a practitioner in the prison service, your working experience is most valuable in allowing us to comprehend how rehabilitative programs are being delivered, and what their effect might be in different penal environments. Your contribution will deepen our understanding of what works and why, and what doesn't and why.

Your contact details will not be provided to any authorities even if they have suggested you to the study. For all circumstances, we will only obtain your contact details from you.

Consenting to participate in the project and withdrawing from the research

Before the interview begins, you will have to give your written consent to participate in this research. You may decide to what extent you would like to consent by filling out the consent form. You could decide not to join the study after reading this explanatory statement. You have the right to refuse to answer any question that you find uncomfortable or withdraw from the interview at any stage without any reason or repercussion. If you want to withdraw from the study after the interview, you will need to contact the research team within two weeks.

Possible benefits and risks to participants

This study aims to help improve our penal system by exploring what is actually functioning well in the prisons and what in fact helps prison residents to change or rehabilitate themselves. Your data could assist in future delivery of rehabilitation services in prisons which offer prison residents a chance to attend more structured and effective rehabilitative programs. This would also be beneficial in reducing re-offending.

The risk attached to your participation are very limited, most likely to be contained to emotional discomfort due to topics being discussed. You can ask for a break or withdraw

from the interview in this situation.

Services on offer if adversely affected

If you have any discomfort after the interview and need help, you may contact the prison counselling service for assistance.

Confidentiality

To protect your identity and data from being identified in the write up of the research, you will be assigned a random number/pseudonym after the interview. If some of your words are directly quoted in the report, your name will never be shown, instead, the number/name assigned to you may be used. The research findings will be reported in a doctoral thesis which may be published upon completion. The research team and examiners will be the chief parties who are going to read the findings. If the thesis has been published as a book chapter or journal article, or has been presented in a conference, other academics or students could have the chance to read through the findings either.

Storage of data

All data will be transferred to and stored in the Monash System so that no one can access the information without authorization of the Chief Investigator. Only computers that can access to the Monash System will be used so as to avoid copying data from the System to portable disk which might lead to disclosure of interviewees' personal information. Data of this research will be kept indefinitely in an encrypted disk even after publication, unless particular participants strongly require disposal of their data.

Results

Results will be available when this research project is completed. A copy of the whole thesis will be sent to the prison. You may contact the management or the researchers indicated on this explanatory statement for the full report.

Complaints

Should you have any concerns or complaints about the conduct of the project, you are welcome to contact the Executive Officer, Monash University Human Research Ethics (MUHREC):

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Thank you,

Ms Daphne Choi

Dr Anna Eriksson

Appendix E: Interview Questions – Previous Program Participants

A. Participation in Sustainable Programs:

1. Why did you decide to join the horticulture/animal program when you were in prison?
2. What did you do in the program?
3. What have you learned from the program?

B. Changes/Benefits Brought by the Program:

1. Do you think the program has changed yourself? In what aspects?
2. Do you think the program has changed your relationships with others such as prison staff and your family? In what aspects?
3. Other than the participants, do you think the program can bring any benefit to other parties inside and outside prison?

C. Difficulties/Encouragement in Desisting Life:

1. How long have you been back to the community? What was the most difficult part when you were first released (e.g. finding job or accommodation, getting along with family and friends)? How did you deal with that?
2. Do you think the things you have learned in the program can help you to deal with the problem(s) emerging in your life, either before or after imprisonment? What is left uncertain, if any?
3. What do you think has contributed the most to your successful post-release life?
4. Do you think there will be any obstacles if we want to widely implement this kind of program in all Australian prisons?

Appendix F: Interview Questions – Ex-Prison Officers

A. Participation in Rehabilitative Programmes:

1. What specific programs are you helping to operate in prison? What are your roles/responsibilities?
2. According to your experiences and observations, what do you think participants can learn from the programme(s) (e.g. soft skills or practical skills)? Any changes in terms of behaviour and attitude?
3. Do you find any differences between your program and other traditional rehabilitation programs?
4. Do you figure out any differences between sustainable program participants and non- program participants in terms of behaviour and attitudes?
5. Do you think the program have an impact on other parties except the offenders, such as prison staff, visitors, program facilitators or even the environment? If yes, in what ways?
6. Do you think this kind of programs is suitable to all types of offenders, or just a particular type?
7. Have there been any problems while running the programme(s)? If yes, what were they and how did you handle them? / Do you think there are enough support and resources for the current programs offered by the prison/government to address the needs of running this kind of program? If no, what else do you think is lacking and what suggestions do you have?

B. Post-Release Life:

1. What kind of support/skills do you think released offenders need to keep them moving on and away from reoffending?
2. What difficulties do you think may appear after they first go back to the community (e.g. finding job or accommodation, getting along with family and friends)?
3. Have you heard about any current or previous program participant expressing their worries or concerns about their post-release life? If yes, what are their concern and have you asked them to seek help from the responsible department?
4. Do you think there will be any obstacles if we want to widely implement this kind of program in more prisons/getting more community members to involve?
5. Do you think the programmes need any improvement (e.g. the variety and number of programmes, eligibility of participation and content of programmes)? If yes, in what way?

Appendix G: Interview Questions – Expert Interviewees

A. Participation in Rehabilitative Programmes:

1. What specific programs are you helping to operate in prison? What are your roles/responsibilities?
2. According to your experiences and observations, what do you think participants can learn from the programme(s) (e.g. soft skills or practical skills)? Any changes in terms of behaviour and attitude?
3. Do you find any differences between your program and other traditional rehabilitation programs?
4. Do you think the program have an impact on other parties except the offenders, such as prison staff, visitors, program facilitators or even the environment? If yes, in what ways?
5. Do you think this kind of programs is suitable to all types of offenders, or just a particular type?
6. Have there been any problems while running the programme(s)? If yes, what were they and how did you handle them? / Do you think there are enough support and resources for the current programs offered by the prison/government to address the needs of running this kind of program? If no, what else do you think is lacking and what suggestions do you have?

B. Post-Release Life:

1. What kind of support/skills do you think released offenders need to keep them moving on and away from reoffending?
2. What difficulties do you think may appear after they first go back to the community (e.g. finding job or accommodation, getting along with family and friends)?
3. Have you heard about any current or previous program participant expressing their worries or concerns about their post-release life? If yes, what are their concern and have you asked them to seek help from the responsible department?
4. Do you think there will be any obstacles if we want to widely implement this kind of program in more prisons/getting more community members to involve?
5. Do you think the programmes need any improvement (e.g. the variety and number of programmes, eligibility of participation and content of programmes)? If yes, in what way?