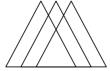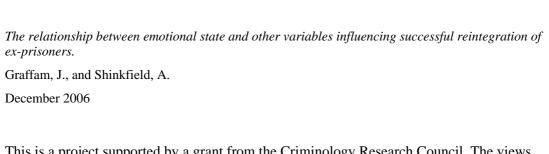# The relationship between emotional state and other variables influencing successful reintegration of ex-prisoners

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The relationship between emotional state and other variables influencing successful reintegration of ex-prisoners.

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Contents

List of Figures and Tables

Acknowledgements

Introduction

The study described in this report investigated the multiple, complex, dynamic, and interactive variables influencing successful reintegration of ex-prisoners, with a particular focus on the role of emotional state in the reintegration process. This investigation involved conduct of a survey to a large group of prisoners approaching release and subsequently following release from prisons in Victoria and Queensland. Participants were 101 adult prisoners who completed a pre-release questionnaire one month prior to their release that focused on prison-related variables, participant background, and anticipated conditions upon release. A post-release questionnaire was administered to the same participants at 1-4 weeks and 3-4 months post-release, focusing on the quality of life conditions experienced following release. As well, the Beck Depression Inventory (BDI-II), Beck Anxiety Inventory (BAI), and the State-Trait Anger Expression Inventory (STAXI-2) were completed at each interview. Of interest, was the level and degree of change in prisoner ratings of depression, anxiety, and anger at pre-release and extending over the post-release period. As well, the strength of relationship between emotional state and the main variables influencing reintegration was investigated; that is, the degree to which reintegration variables (such as social support, drug use, post-release program participation, rated health) are associated with depression, anxiety, and anger among ex-prisoners.

This report commences with the description of an ecological model of community reintegration that enables the main variables that may influence reintegration of ex-prisoners to be easily conceptualised and understood. This model enables a better understanding, therefore, of the complex and multifaceted process of reintegration of ex-prisoners. A review of the international and Australian literature relevant to community reintegration of ex-prisoners is then presented, consistent with this conceptual framework, with a specific emphasis on the role of emotional state in post-release outcomes for this group. Following the literature review, the rationale and expected findings are described. In the second section of the report, the study design and method are described. In the third section, results are presented. Results are presented in terms of: (1) the type and extent of change in depression, anxiety, and anger scores over the period under investigation, and (2) the degree to which the identified variables relevant to reintegration are associated with, and contribute to,

depression, anxiety, and anger among ex-prisoners in the short-term (1-4 weeks following prison release) and longer-term (3-4 months following prison release). The fourth and final section of the report includes a discussion of the results, implications for reintegration theory, and practical implications for promoting successful reintegration of ex-prisoners.

A Three-Part Ecological Model of Community Reintegration

The present investigation identified three real-life ecological domains, each comprising variables which may influence the reintegration process for ex-prisoners. The three ecological domains are *Intra-Personal Conditions* incorporating the variables of physical and psychological health, substance use, education and skills level, life experiences (e.g., age, education), and emotional state; *Subsistence Conditions* incorporating the variables of finance, employment, and housing; and *Support Conditions* incorporating the variables of social support, support services, and criminal justice support. Many of these variables are dynamic in nature; that is, they may change over time, and they comprise the main variables identified in the offender literature as influencing post-release outcomes of ex-prisoners. The three-part ecological model of community reintegration developed for this investigation is presented in Figure 1.

Figure 1. A three-part ecological model of community reintegration of ex-prisoners.

One advantage of an ecological systems approach is that it permits a more specific discussion of the variables within and between each domain that may influence post-release outcomes. For example, the process of reintegration may be influenced significantly by ecological variables such as stability of accommodation, amount and quality of contact and support from family and/or friends, extent of substance use, and mental health status. Conceptualisation of post-release outcomes within an ecological systems framework has the additional benefit of allowing for situations in which conditions affect other conditions, often across the three domains. This approach is particularly useful given the focus of the present investigation on the dynamic and interactive relationship between emotional state of ex-prisoners and selected variables influencing success in reintegration. It may be, for example, that an ex-prisoner's emotional condition, such as elevated depression, anxiety, or anger may impact on variables relevant to the support domain in one situation (e.g., by negatively affecting

restoration of family ties) and the subsistence domain in another (e.g., by negatively affecting job search or job maintenance). Conversely, difficulty experienced in both social conditions and employment together can impact on emotional state; for example, by increasing depressive symptomatology. For this reason, the conceptual model presented in Figure 1 depicts intra-personal conditions, subsistence conditions, and support conditions as an inter-related set of influences on community reintegration.

It is also important to note that the multiple, complex, dynamic, and interactive nature of variables influencing reintegration success of ex-prisoners cannot be accurately presented in the form of a universal diagram. Interactions among intra-personal conditions, subsistence conditions, and support conditions are multi-faceted and multi-directional, supporting the observation of multiple and varied pathways to success. These interactions among variables may impact on the success of the ex-prisoner by promoting reintegration, or alternatively, serve as barriers that constrain success. Thus, specific conditions may be considered as either 'pro's or 'con's; promoting or constraining reintegration. Although causality may not be readily identifiable among variables influencing the reintegration process, examination of the multiple interactivity of variables provides a significant contribution to extant research on post-release outcomes for ex-prisoners. The following section provides a critical review of literature of the barriers to successful reintegration of ex-prisoners using the ecological framework outlined above.

Barriers to Successful Reintegration of Ex-prisoners

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Intra-Personal Conditions

</div>

Physical and Psychological Health

While there is limited evidence (La Vigne, Visher, & Castro, 2004) that a large majority of prisoners perceive their physical health to be good or excellent both while in prison (86%, n = 400) and in the months following release (87%, n = 205), several large-scale studies have documented higher rates of chronic and infectious diseases among prisoners compared to the general population (e.g., National Commission on Correctional Health Care [NCCHC], 2002). Recent data from the National Institute of

Justice on the health status of prisoners approaching release in the United States indicates a higher prevalence of particular infectious diseases (eg., M. tuberculosis, HIV, hepatitis B virus, hepatitis C virus), mental health disorders, and substance abuse problems among prisoners compared to the general population. In fact, infection rates for HIV/AIDS, tuberculosis, and hepatitis C among the prison population have been estimated as five to ten times higher than the general population of the United States (Hammett, 2000, cited in Travis, Solomon, & Waul, 2001).

Similarly high prevalence rates of chronic and infectious diseases have been reported among the Australian prison population. A recent survey of 630 Victorian prisoners revealed that 57 percent of the prisoner sample was infected with hepatitis C, compared to only one percent of the Australian general population (Hellard, Crofts, & Hocking, 2002). With respect to HIV/AIDS, the most recent Australian data indicate that 0.2 percent of Australian prisoners (and 0.2 percent in Victoria as well) are infected with HIV/AIDS, compared to 0.074 percent of the Australian general population (National Centre in HIV Epidemiology and Clinical Research, 2005). This figure may underestimate the true number of prisoners infected with HIV/AIDS, however, as not all prisoners entering Australian prisons are tested for HIV.

The Victorian Prisoner Health Study also affirmed the high prevalence rates for chronic medical problems and mental health problems endemic among national and international prison populations. In a study of approximately 500 Victorian prisoners, prevalence rates for hepatitis (A, B, and C), asthma, and sexually transmitted diseases, among other medical conditions, was considerably higher than the general Australian population. As well, the prisoner sample showed higher levels of major mental health conditions including depression, than the general Australian population, and higher than average levels of suicide ideation and self-harm (Deloitte Consulting, 2003). In fact, it is estimated that the incidence of mental illness among incarcerated individuals (incorporating schizophrenia/psychosis, major depression, bipolar disorder, and post-traumatic stress disorder) is at least twice that of the general population of the United States (Ditton, 1999; Fazel & Danesh, 2002), Britain, and Australia (Fazel & Danesh, 2002). A large number of prisoners with mental illness also have a history of alcohol and/or drug abuse (Ditton 1999; Travis et al., 2001), compounding the difficulties that may be experienced upon release. As well, a large proportion of female prisoners have

a history of physical or sexual abuse (Ditton, 1999) which may contribute to their mental health problems.

Substance Use

The most prominent condition of ill-health among prisoners is substance use (Solomon, Waul, Van Ness, & Travis, 2004). Approximately 80 percent of prisoners in the United States have been identified as having some type of drug or alcohol problem (Mumola, 1999). High dependency levels are similarly indicated among prisoners awaiting release, with Mumola (1999) reporting that 74 percent of prisoners in the United States who are awaiting release within the next 12 months have a history of drug use and/or alcohol abuse.

A similar pattern of drug use has been identified among Australian prisoners and police detainees (Butler, Levy, Dolan, & Kaldor, 2003; Makkai & Payne, 2003; Schulte, Mouzos, & Makkai, 2005). The Drug Use Careers of Offenders (DUCO) study revealed that 62 percent of 2,135 Australian adult male prisoners reported regular use of illegal drugs in the six months prior to their most recent arrest, with the two most regularly used drugs being cannabis (53% reporting regular use) and amphetamines (31% reporting regular use) (Makkai & Payne, 2003). As well, 35 percent of the sample was identified as poly-drug users.

Dependency problems have also been reported among ex-prisoner and offender samples. For example, a British study conducted by Bridges (1998, cited in Fletcher, 2001) reported that 48 percent of 739 offenders who had recently completed a supervision order or community sentence had drug or alcohol-related problems. In Australia, high rates of drug and alcohol use have been reported among ex-prisoner samples (Kinner, 2006), with some evidence for a decline in risky alcohol use over the first few months of release from pre-incarceration levels. Excessive alcohol use has also been reported among prisoner samples. The Victorian Prisoner Health Study (Deloitte Consulting, 2003) identified a large proportion (41%, n = 451) of prisoners with alcohol abuse or dependence using the Alcohol Use Disorders Identification Test (AUDIT). The findings above indicate that the prevalence of substance use disorder typically varies between 40 and 80 percent among prisoner samples, which is

6

substantially higher than the prevalence rate of 7.7 percent in an Australian community sample of 10,600 adults (Henderson, Andrews, & Hall, 2000).

Given that a high proportion of the prison population experiences physical and mental health problems, it follows that multiple diagnoses are common among this group (Hammett, Roberts, & Kennedy, 2001). In fact, between 3 and 11 percent of the prison population in the United States have a co-occurring substance abuse disorder and mental health condition (Edens, Peters, & Hills, 1997). Multiple diagnoses of physical and mental ill-health, in addition to substance use problems, provide a considerable challenge to reintegration.

Education and Skills

There is little empirical information on the educational attainment of prisoners, although what exists suggests that they are one of the most educationally disadvantaged groups in society. In a 2001 census of 3,391 prisoners in Victoria (ABS, 2002) only 3.9 percent had achieved a tertiary level degree or diploma as their highest level of educational attainment, and only 6.1 percent had completed secondary level. The educational attainment of prisoners appears considerably lower than for the general Australian population, given that comparatively more adults (20%) in the general population had a tertiary level degree or above as their highest level of education, and comparatively more Australian adults (55%) had completed secondary school (ABS, 2005b). In Victoria, a recent study of education and training provisions in prisons (Bearing Point, 2003) identified that 40 percent of the sample of 949 respondents had not completed Year 10 and only 20 percent had completed Year 12.

A general pattern of educational disadvantage for prisoners is also reflected in international studies. In terms of educational attainment, a 1997 survey indicated that the majority of state (68%) and federal (49%) prisoners in the United States had not received a high school diploma compared to only 18.4 percent of the general population (Harlow, 2003). As well, low literacy levels have been noted among large samples of both British (Fletcher, 2001) and American (Haigler, Harlow, O'Connor, & Campbell, 1994) prisoners.

Given the generally low levels of educational attainment and literacy among prisoners and the typically low participation in education programs in prison (Lynch & Sabol, 2001), it is of no surprise that ex-prisoners appear to be similarly educationally disadvantaged. A recent study in the United States indicated that the median education level of parolees is 11th grade, with 13 percent of paroled prisoners having achieved less than an 8th grade education level, and 45 percent having achieved between a 9th and 11th grade education (Bureau of Justice Statistics, 1997). A recent Victorian study similarly indicated a generally low level of educational attainment among 81 ex-prisoners, with 63 percent of these individuals having achieved a Year 10 level of secondary education or lower (Graffam, Shinkfield, Mihailides, & Lavelle, 2005).

Subsistence Conditions

Finance

Prisoners are usually released with a small amount of money, primarily their earnings from prison industry participation. In Australia, prison work is usually mandatory (at very low pay) and an enforced savings plan is automatically set up in which 20 percent of in-prison earnings are transferred to each prisoner's savings account. Built-up savings and Centrelink emergency payments (that are usually organised pre-release) increase the amount of money a prisoner is likely to have upon release. Even so, amounts at release are generally low, and likely to vary between $AUS200 and $AUS800 (Graffam, Shinkfield, Lavelle, & McPherson, 2004), although some long-term prisoners have been released with substantial savings, upwards of $AU10,000 (D. Brien, personal communication, February 8, 2003).

In the United States, release funds have been reported to vary between $US25 and $US200, although it is common for prisoners to be released without funds (Travis, et al., 2001). In fact, a recent study indicated that while 84 percent of 205 male releasees received some government-provided funds at release (typically $US10), almost half of this group did not have any other money, with the median amount of money at the moment of release being only $US4 (La Vigne et al., 2004).

Interviews with ex-prisoners confirm that supporting themselves financially is difficult upon release, with most unemployed ex-prisoners relying heavily on income

from family members and friends (La Vigne et al., 2004). In fact, a substantial proportion of ex-prisoners have debt upon release which for an estimated 20 percent (of 153 respondents) exceeds their monthly income (Visher et al., 2004). There appears to be a substantive link between substance use and debt, with those who owe money at least twice as likely to use drugs or to be intoxicated by alcohol than those without debt (La Vigne et al., 2004).

Employment

There are numerous benefits associated with employment of ex-prisoners including those related to the individual (e.g., increased social contact, improved self-esteem and confidence, improved financial conditions), family (e.g., provision of financial assistance to family networks), as well as wider system level benefits including reduced crime and re-incarceration rates, reduced costs within the corrections system, improved community safety, and the addition of capable and enthusiastic workers into a shrinking workforce. In addition, potential social justice benefits related to employment include promotion of equality of opportunity, and improved societal attitudes related to the inclusion of ex-prisoners in labour market activities. A significant factor in employment is reduced costs to government in terms of reduced payment of benefits and lower recidivism rates.

The impact of wide-ranging barriers to employment for ex-prisoners is evident in employment participation rates. In Australia, the employment participation rate among the general population was 64.5 percent in May 2006 (ABS, 2006). While it is difficult to estimate employment rates of ex-prisoners, what little we know suggests that this group is very much disadvantaged. In the Bridging the Gap program in Victoria, only 21 of 198 ex-prisoner participants (11%) were employed full-time at six months post-release or at program completion, and 18 (9%) were in casual employment (Melbourne Criminology Research and Evaluation Unit, 2003). The program participants were identified as a group with high support needs and drug and/or alcohol issues which adds to the employment disadvantage of this group, and may contribute to their low employment rates. An employment placement program for ex-prisoners and community-based offenders in Victoria achieved relatively high placement rates, with 34 percent of registered participants placed into employment in

the first two years of the program. Sixteen percent of the sample maintained their job for a period of 13 continuous weeks (Graffam et al., 2005).

In Britain, more than half (60%) of the general population are employed compared to only 21 percent of over 1,000 offenders under probation supervision (Mair & May, 1997), while employment rates of ex-prisoners have been reported as closer to 10 percent (Sarno et al., 2000). In North America, employment participation rates of ex-prisoners were somewhat higher in New York at 40 percent in 1999 (Meredith, 2000, cited in Nelson & Trone, 2000). There also appears to be a disparity in wage earnings between ex-prisoners and comparable groups. Waldfogel (1994), for example, reported that ex-prisoners that had been imprisoned for larceny and fraud had substantially lower incomes (16% to 28%) than offenders who were convicted of these crimes, but not imprisoned. Additional studies have also reported reduced earnings among ex-prisoner samples than for comparable workers (Freeman, 1999, cited in Freeman, 2003; Western, 2002). Lower earnings by ex-prisoners may be partly explained by the fact that this group is largely restricted to low skilled jobs with no provision for benefit packages (Taxman, Young, & Byrne, 2002). Given that ex-prisoners are typically employed in low-wage jobs with few tangible rewards including limited opportunities for advancement, it should not be surprising that many ex-prisoners opt to return to a criminal lifestyle (Solomon, Johnson, Travis, & McBride, 2004).

A number of descriptive studies and empirical reports have described wide-ranging barriers to employment for ex-prisoners (e.g., Fletcher, 2001; Heinrich, 2000; Mukamal, 2001; NACRO, 1997; Webster, Hedderman, Turnbull, & May, 2001). For example, Webster et al. (2001) identified numerous barriers to employment including attitudes of employers to ex-prisoners and crime, lack of job contacts due to segregated social networks, numerous financial difficulties impacting on interview attendance, purchase of clothing or equipment, and problems making the transition from benefits to employment. Various intra-personal conditions were identified as restrictive to employment, including behavioural problems, lack of basic skills and/or poor qualifications, low self-esteem, confidence, and motivation, and absent or poor work experience history. Other investigators have alluded to the difficulty

10

experienced by ex-prisoners in adjusting to the routine of work (Visher & Travis, 2003).

Investigators have also reported that employer discrimination plays an important role in limiting employment opportunities for ex-prisoners (Fletcher, 2001; NACRO, 1998). Several studies have examined employer attitudes toward hiring ex-prisoners (e.g., Albright & Denq, 1996; Graffam, Shinkfield, Lavelle, & Hardcastle, 2004; Holzer, 1996; Holzer, Raphael, & Stoll, 2003), with the finding that employers are generally reluctant to hire a person with a criminal record. Moreover, a survey of 619 employers in Los Angeles by Holzer et al. (2003) confirmed that self-reported willingness to hire did correlate with actual hiring behaviour of these firms, providing additional evidence of employment disadvantage for ex-prisoners.

Housing

Accommodation is an important variable that may affect successful transition into the community, yet stable accommodation can be very difficult to secure, given that ex-prisoners typically have limited financial resources upon release so that private housing is often beyond their means. In addition, these individuals are often unable to access priority public housing upon release which further exacerbates their social disadvantage (Social Exclusion Unit, 2002). In Victoria, numerous service difficulties in obtaining public housing for ex-prisoners have been identified including the fact that prisoners are not viewed as 'homeless' in prison, despite periods of homelessness prior to imprisonment; being taken off public housing waiting lists while incarcerated; and an inability to apply for public housing in advance as precise release dates are generally unknown (Ogilvie, 2001).

Supportive friends and family members play a significant role in the successful reintegration of the ex-prisoner particularly in the areas of accommodation assistance. In fact, many ex-prisoners live with a family member following prison release (Nelson, Deess, & Allen, 1999; Visher et al., 2004). However, a fair proportion of ex-prisoners find it difficult to achieve a stable housing situation. For example, in the Bridging the Gap program in Victoria, only half (51%) of 173 participants with drug and/or alcohol issues who were assessed at six months after prison release were identified by program workers as being in a stable housing situation, and 33 percent

had moved three or more times over the same time period (Melbourne Criminology Research and Evaluation Unit, 2003).

Ex-prisoners who are faced with limited housing choices are often forced to access crisis accommodation such as backpacking hostels and transient hotels which may provide a 'breeding ground' for substance abuse and other criminal activity, as well as restricting the individual's social network to those with similar backgrounds (Rowe, 2002). In fact, investigators have acknowledged that drug rehabilitation may be largely ineffective if problems related to the need for secure and affordable accommodation are not addressed (Webster et al., 2001). As well as exacerbating the difficulties of ex-prisoners with histories of substance abuse, unstable and unsafe accommodation is more disruptive to medication adherence and continuation of care for those with physical and mental health problems (Hammett et al., 2001), indicating the inter-relatedness of variables.

Whatever the reason, those ex-prisoners who are unable to achieve stable housing are significantly more likely to be reincarcerated than those with stable housing (Baldry, McDonnell, Maplestone, & Peeters, 2003; Metraux & Culhane, 2004, cited in La Vigne et al., 2004). Ex-prisoners who are in an unstable housing situation (e.g., in a homeless shelter) have also been reported as much more likely to abscond from parole (Nelson et al., 1999). The interdependence and interactivity of variables is quite apparent from these results.

Support Conditions

Social Support
Social support plays a central role in prison life and upon release. There are few studies that have examined the level and type of social support between prisoners and their families, of which only a handful have extended the analysis to explore how these social relationships may influence mental well-being (e.g., Biggam & Power, 1997; Lindquist, 2000). Biggam and Power (1997), for example, explored the relation between social support and psychological distress in a sample of 125 incarcerated young offenders. The average number of important relationships both within and outside the prison environment was quite high at 7.0, with most identifying their immediate family as a source of support. Overall, those inmates with higher levels of

12

psychological distress were viewed as more deficient in terms of social support, and a greater discrepancy in actual/ideal levels of social support from prison staff were the main predictors of distress. These findings suggest that the type of support, and in particular perceived deficiencies in support, may be more influential on mental health outcomes for prisoner samples than the size of the support group.

Ex-prisoners typically have a limited social network. La Vigne and colleagues (2004) reported that about half (48%, n = 205) of the male participants interviewed between four and eight months after their release indicated that they had no close friends. For those who did report a close friendship, a large number of the friends identified had been in prison (40%) or had participated in criminal activity. Despite the fact that many ex-prisoners live with family members upon release (La Vigne et al., 2004; Nelson et al., 1999; Visher et al., 2004), social isolation has been described as a 'core experience' of many ex-prisoners as a result of homelessness or unstable, unsuitable housing (Baldry et al., 2003).

Only a handful of studies have examined the relationship between the level and type of social support received prior to prison, in prison, and/or following release to that of relative success in reintegration. Negative family relationships including threatening behaviour or physical abuse toward the ex-prisoner in the six months prior to their incarceration has been associated with higher rates of reconviction and reincarceration (La Vigne et al., 2004). Although little is known about the influence of peers on prisoners re-entering the community, it is evident that negative social connections with peers from in-prison social networks may encourage the ex-prisoner to resume criminal activity (Moore, 1996). In contrast, those ex-prisoners with greater family support have shown greater success in reintegration in the form of more stable housing, more stable (or higher rates of) employment, a lower level of continued criminal activity, and reduced drug use than those with less family support (e.g., Nelson et al., 1999). An additional outcome of closer family relationships and greater family support was lower rates of return to prison (La Vigne et al., 2004). These findings point to the interdependence and interactivity of variables relevant to reintegration of ex-prisoners.

Support Services

As a group, ex-prisoners require immediate and responsive programs that address their multiple and varied needs. There is evidence that well-conceived job training and placement programs can be effective in improving employment opportunities for ex-prisoners, particularly when combined with other support services that address issues of health, substance use, and accommodation (Lawrence, Mears, Dubin, & Travis, 2002). There are several transition programs in Victoria that target accommodation needs of ex-prisoners, including those prisoners with a history of homelessness or who are likely to be homeless upon release. The Bridging the Gap program in Victoria, for example, provides housing support to drug and alcohol dependent ex-prisoners. There is also a range of housing services provided by church groups and other social welfare organisations, such as the Melbourne City Mission, that aim to support the process of reintegration for ex-prisoners, although the bulk of these services are offered to disadvantaged groups, and are not specifically tailored to meet the needs of ex-prisoners. In Victoria, education and training programs do not exist per se for ex-prisoners; rather, generic courses are available through registered vocational education and training providers. These programs may be somewhat limited in meeting the complex needs of this group.

There has been a growing research interest from Australia, New Zealand, Britain, Canada, the United States, and Europe, in drug treatment programs for prisoners and ex-prisoners. Drug treatment programs include prison-based education programs, non-residential treatment programs, and unit-based residential treatments (see Centre for Applied Psychological Research [CAPR], 2003). Depending on the treatment regime, in-prison programs have been shown to produce positive effects, including reduced recidivism and reduced substance use (see CAPR, 2003). There is also a wide range of community-based, non-residential and residential treatment programs that ex-prisoners may access upon their release from prison. Community-based programs incorporate counselling, education, and cognitive-behavioural principles, among other approaches, with varying success in terms of reductions in substance use and recidivism (see CAPR, 2003). Those community-based programs that are more structured with a focus on treatment per se, appear more effective than general approaches incorporating support and counselling (CAPR, 2003).

In Australia, like other Western countries, there are various in-prison programs that aim to identify and treat physical and mental health problems. There are no specialist mental health services for ex-prisoners in Australia despite the high rates of mental ill-health among this population. Those ex-prisoners with mental health problems are also not likely to actively seek out treatment, which may exacerbate their condition. Exclusion of prisoners who are serving a short sentence (less than 6 months) from prison-based programs including substance use and mental health treatment has also been reported as problematic (Webster et al., 2001).

In many ways, the programs described above can be viewed as facilitating post-release outcomes for ex-prisoners, in terms of increasing vocational and job search skills in the case of employment programs, improving housing prospects for those accessing housing support services, reducing the likelihood of reoffending and continued drug use for substance use programs, and improving the physical and mental health of those individuals with specific health problems. However, access to these services may be problematic and financially restrictive for many ex-prisoners, which is clearly disadvantageous to the ex-prisoner.

Criminal Justice Support

Criminal justice services provide support to parolees who are undergoing the process of life change following prison release. Support in reintegration is provided, as well as assistance and monitoring in the form of case management to assist the parolee to 'stay on track'. Ex-prisoners are often required to meet several responsibilities for release, including finding employment, random drug screenings, day reporting, and regular parole or probation-officer meetings. While these responsibilities provide structure for the ex-prisoner and assist the individual in making a positive life change, they may also present some difficulties. In fact, successful transition to the community is somewhat dependent on the ability of the ex-prisoner to avoid any further difficulties including antagonistic interactions with police, complying with court-ordered mandatory reporting, and managing to integrate those obligations into a recovery schedule that might include a range of training and support activities, as well as employment (Graffam et al., 2002, 2004).

These different forms of support may impact significantly on post-release outcomes for ex-prisoners; in some cases improving reintegration outcomes, and in others, reducing opportunities for success. In practice, criminal justice providers also often impose conditions that may interfere with reintegration, such as regular urine tests for substance users that require interrupting a routine to report, albeit in the process of providing support. Thus, while criminal justice involvement is often conceived of as an oppositional variable, it may also be viewed as a support variable given that reporting and monitoring of behaviour is part of getting and keeping the lives of ex-prisoners on a path to successful reintegration.

Emotional State as a Reintegration Variable

There are virtually no studies that have examined depression, anxiety, and/or anger among ex-prisoners, and only a few have measured emotional state at pre-release and extending into a post-release period. Therefore, this study fills a gap in the extant research by examining emotional state (depression, anxiety, anger) at pre-release and at two critical stages of reintegration, as well as examining the strength of relationship (interactivity) between emotional state and other variables influencing successful reintegration. In this way, the study focused on identification of the key ingredients to successful reintegration for ex-prisoners. Numerous variables are associated with depression, anxiety, and anger as outlined in the next section.

Variables associated with Depression, Anxiety, and Anger

Relatively little is known about the variables associated with feelings of depression, anxiety, and anger among prisoners. Numerous background variables (e.g., level of education, previous employment), social variables (e.g., level and type of family support received while in prison), and environmental variables (e.g., prison overcrowding) are presumed to contribute to individual differences in the emotional states of prisoners. It is likely, for example, that the prison environment may contribute to feelings of depression, anxiety, and/or anger given that there are limited opportunities for the development of supportive interpersonal relationships, poor living conditions, restricted personal space, and limited personal choice, among other factors. In fact, several environmental conditions associated with the prison experience have been identified as risk factors for depression including loss of both

social support and societal freedom, prison overcrowding, reduced personal control, reinforcement of maladaptive behaviours, and likely exposure to punishment (e.g., Heiby & Staats, 1990, cited in Varese, Pelowski, Riedel, & Heiby, 1998).

Various studies have demonstrated a link between environmental factors like prison overcrowding and maladaptive behaviour, including suicide (e.g., Cox, Paulus, & McCain, 1984; Lester, 1990). Other prison-related variables that may impact on emotional state include poor sanitation and separation from family and friends (e.g., Cooper & Berwick, 2001). However, given that higher levels of mental distress have been reported among prisoners in better run, less-crowded facilities (Cooper & Berwick, 2001), it is clear that such emotional reactions are not linked exclusively to physical conditions within prisons. Moreover, several studies have examined the relation between general psychological functioning and the number and type of coping mechanisms used by prisoners (Cooper & Livingston, 1991; Porporino & Zamble, 1984), with results typically showing that coping strategies are largely ineffective in reducing stress, indicating the role of other factors. For example, victimisation in prison may contribute to the occurrence of symptoms of depression among prisoners (Hochstetler, Murphy, & Simons, 2004). There is also evidence that prisoners who receive more frequent visits and letters have lower anxiety than those with less frequent contact (Cooper & Berwick, 2001), although its relationship to depression is less clear. Depression at a more severe level may be related to self-injurious behaviour (Toch, 1992), suicide and suicide attempts (Daniel & Fleming, 2005; Paffenbarger, Lee, & Leung, 1994), and drug and/or alcohol abuse (e.g., Chiles, von Cleve, Jemelka, & Trupin, 1990).

There are several explanations that can account for the high incidence of mental distress observed among prisoners. While some investigators argue that mental distress is largely a consequence of the prison experience (e.g., Haney, 2002; Sykes, 1958), others argue that it is the composition of the prison population itself that explains the high levels of mental distress and maladaptive behaviours observed among this population (see Lindquist & Lindquist, 1997). Proponents of the latter perspective suggest that the origins of emotional distress predate imprisonment, and are 'imported' into the prison environment. There is also support for an interactionist view, with mental distress arising from an interaction between the prison setting and

the predisposition of the inmate to particular psychological and social problems (see Adams, 1992, for a review).

Prevalence of Depression and Anxiety among Prisoners and Ex-Prisoners

The review that follows will provide evidence for the high prevalence of depression and anxiety among prisoner and ex-prisoner samples. An early study by Chiles and colleagues (1990) found that 30 percent of 109 male prisoners assessed upon prison entry using the DIS met the DSM-III-R (APA, 1987) criteria for a lifetime diagnosis of major depression, and five percent received a lifetime diagnosis of dysthymia (a chronic depressed mood for at least two years). Consistent with research reporting substance use problems among the prison population (e.g., Makkai & Payne, 2003; Mumola, 1999), of those prisoners diagnosed with depression, the majority (82%) had symptoms of alcohol or drug abuse emphasising the inter-relatedness between variables. An Australian study by Herrman, McGorry, Mills, and Singh (1991) evaluated 189 predominantly male prisoners using the Structured Clinical Interview for DSM-III-R in the first few months of their sentence. Twelve percent of the inmates received a current diagnosis of mood disorder based on the DSM-III-R criteria, of which major depression was the most common current diagnosis (10%). Lifetime diagnoses of mood disorder were given to over 30 percent of the sample, of which 29 percent received a lifetime diagnosis for major depression. Consistent with Chiles and colleagues (1990) the prevalence rate of lifetime diagnosis of substance use disorders was high at 69 percent.

The findings reported above are reflected in a recent review of surveys on the prevalence of serious mental disorder in prison populations in Western countries. Fazel and Danesh (2002) identified 31 surveys comprising 10,529 prisoners which reported on major depression. Overall, 10 percent of male prisoners and 12 percent of female prisoners were diagnosed with major depression. It appears, therefore, that while prevalence rates for depression among prisoners vary, depressive disorders in this population are relatively common, typically ranging between 10 and 30 percent (e.g., Chiles et al, 1990; Collins & Bailey, 1990; Herrman et al., 1991) which is well above that reported among adult community samples at 2 to 9 percent (ABS, 1998; DSM-IV, APA, 1994; Henderson et al., 2000).

Additional studies have reported prevalence rates of depression using self-report instruments such as the Beck Depression Inventory [BDI, BDI-II] that do not meet the diagnostic criteria for major depression, but rather, indicate a continuum of depression (e.g., Black et al., 2004; Boothby & Durham, 1999; Eyestone & Howell, 1994). For example, Boothby and Durham (1999) assessed 1,494 prisoners (88% male) upon intake using the BDI in order to assess the relationship between depression and other key variables, including age and prior incarcerations. Results indicated that nearly half (43%) of the prisoners were in the minimal (or normal) range of depression. Of concern, 30 percent were in the mild range, 22 percent fell in the moderate range, and five percent were classified in the category of severe depression. These figures indicate elevated scores for depression among prisoners compared with the general population.

On a local level, the Victorian Prisoner Health Study (Deloitte Consulting, 2003) recently affirmed the high prevalence of depression among the Victorian prison population. The BDI was administered to 338 male prisoners and 113 female prisoners. Results indicated that the majority of the male prisoners (61.8%) met the BDI criteria for minimal (normal) depression, with the remainder meeting a diagnosis of mild depression (15.1%), moderate depression (15.4%), and severe depression (7.7%). In contrast, about half of the female prisoners (50.4%) met the BDI criteria for minimal depression, with comparatively more females meeting a diagnosis of mild depression (20.4%), moderate depression (20.4%), and severe depression (8.8%) than male prisoners.

In terms of anxiety, Biggam and Power (1997) found that more than half of the sample (55%, N = 125) was in the clinical range of anxiety and 47 percent warranted clinical intervention for depression. Likewise, Lindquist and Lindquist (1997) surveyed 198 prisoners who had served an average of five months using the Brief Symptoms Inventory. Overall, the elevated scores for the symptom dimensions of depression and anxiety were consistent with those of adult psychiatric patients, and were indicative of significant mental distress for some prisoners. Other studies have also indicated significantly higher levels of depression and anxiety among prisoners than for community samples, with multiple diagnoses common (e.g., Bland, Newman, Dyck, & Orn, 1990), highlighting the complexity of support needs for this group.

There are only a handful of studies that have examined how emotional state may change from pre-release to post-release. Renzema (1982), for example, interviewed 53 prisoners who were released under parole supervision on four occasions: in the month prior to release, 2 to 4 weeks after release, and 3 and 6 months following release. Findings indicated that the stress levels of prisoners were highest just prior to release, and that they reduced over the course of their return to the community. Upon release, stress levels were typically lowest in the first month of release, and had increased by the third month. At six months post-release, the stress levels of the participants approached pre-release levels. Mabli and colleagues (1985) included a measure of stress at pre-release and earlier in the prison sentence in a cross-sectional study of 98 prison inmates. Using a range of measures including the MMPI, findings suggested that some prisoners did experience pre-release stress, with female prisoner participants more vulnerable to these effects than males.

Taken together, there is a relatively large body of research on the prevalence of depression among prisoners. Collectively this research provides support for significantly higher prevalence rates among prisoners than for adult community samples. In terms of anxiety, a very small body of research with prisoner samples has indicated that anxiety disorders are relatively common in this population, with prevalence rates above that reported for an Australian community sample (n = 10,600 adults) at 9.7 percent (ABS, 1998; Henderson et al., 2000).

Of significance, there are only a handful of studies that have examined how emotional state may vary from pre-release and extending into a post-release period, with limited support for the view that the emotional state of prisoners may be elevated just prior to release, and reduce over a period of reintegration. Regardless, it remains largely unclear whether prisoners leave their depression and anxiety behind them when they are released. If not, depression and anxiety may have a significant impact on reintegration.

Prevalence of Anger among Prisoners and Ex-Prisoners
Anger research with prisoner samples appears to have focused largely on the prediction of violent behaviour among male adult offenders with a history of violent offending (Monahan & Steadman, 1994; Mossman, 1994) and its relation to various

background and other key variables (e.g., Wood & Newton, 2003). Numerous studies have also examined the effectiveness of anger management programs for specific prisoner samples (e.g., Eamon, Munchua, & Reddon, 2001; Howells et al., 1999; Ireland, 2004; Watt & Howells, 1999). A brief review of research follows in order to provide a general understanding of the experience, expression, and control of anger among prisoner samples, and the factors that may be related to the occurrence and/or maintenance of elevated anger levels.

Wood and Newton (2003) examined the relationship between anger, blame attribution, and personality in 66 male offenders in Icelandic prisons. Contrary to the expectation that higher levels of anger arousal would be evident among violent (n = 33) rather than non-violent offenders (n = 33), no significant differences in anger levels were found between offender groups using the Novaco Anger Scale (Novaco, 1994). This finding indicated that high levels of anger do not necessarily translate into violent behaviour, although the small sample size may contribute to the lack of a significant effect. Given that type of crime was not related to anger levels, Wood and Newton also conducted a regression analysis to examine demographic and psychological variables that may predict anger. The four variables of recidivism, neuroticism, psychoticism, and socially desirable responses were found to predict anger levels. The authors also suggested that recidivists may show a tendency to react with anger which may, in part, be related to reduced contact with friends and family over their prison term than do first-time offenders.

Another study which explored the link between anger and offending behaviour was conducted by Novaco and Taylor (2004). They assessed 129 male patients confined in a psychiatric hospital who had a developmental disability, most of whom had either a conviction for violence or a history of violent or aggressive behaviour. Results indicated no significant relationship between anger scores and history of violent offending, indicating that the relation between these factors is complex. These findings may also suggest that at least for this group, violence is an impulsive behaviour that is not driven by anger.

Contrary to these findings, Mayne and Ambrose (1999) reported evidence for significantly higher levels of anger among violent men than for non-violent men, and

suggested that "anger is a motivational and causal agent underlying violent behaviour" (Mayne & Ambrose, 1999, p. 360). In this review study, Mayne and Ambrose also reported that higher levels of anger typically occur among clinically depressed women than for non-depressed women, and that increased levels of depressive symptoms in women are associated with stronger expressions of anger.

While extant literature on gender differences in anger levels among prisoners is relatively limited, what exists appears to suggest greater anger problems among female prisoners than for male prisoners. An Australian study by Suter, Byrne, Byrne, Howells, and Day (2002), for example, reported that incarcerated females (n = 50) had higher scores on all of the STAXI scales, except anger control, than did incarcerated males (n = 121), which was indicative of higher anger levels and reduced control in the expression of anger among the female prisoners. The difference in anger levels between the male and female prisoners was attributed to a higher incidence of mental health problems among the former group. Regardless, scores on all scales were in the normal range.

Several studies of prison adjustment have provided evidence for an increase in reported anger over time. Zamble and Porporino (1988), for example, found that while the proportion of prisoners experiencing anger may reduce with time served, of those who are affected, there may be an increase in the frequency of anger episodes over time, with the implication being that anger is a "stable and present feature of long term imprisonment" (Howells et al., 1999, p. 47). Another study that examined self-reported anger over a period of incarceration was conducted by Smyth and colleagues in 1994. Rather than including a generic prisoner sample as Zamble and Porporino (1988) had done, they assessed a small group of male prisoners (n = 30) who had engaged in parasuicide in the initial period of incarceration. Findings indicated no significant difference in the mean state anger and trait anger scores over time. There was evidence, however, for elevated levels of trait anger, in particular, among a relatively large proportion of the at-risk sample, indicating a general predisposition toward anger, with anger maintained at a high level over the prison term.

Taken together, the rather limited research with prisoner samples indicates that prisoners frequently experience problems with anger control and the expression of

anger. In fact, prisoners score significantly higher on measures of anger expression and anger arousal than other groups (Spielberger, 1991). Moreover, higher scores on anger measures have been associated with violent offenders than for non-violent offenders (Mills, Kroner, & Forth, 1998), although some studies have reported contrary findings (Wood & Newton, 2003). There are relatively few studies on the prevalence of anger among prisoners and particularly, ex-prisoners; instead, the focus of anger research has been largely on the correlates of anger and the effectiveness of anger management programs for those prisoners identified as having anger problems. Moreover, there appear to be no empirical studies which have assessed participant anger at pre-release and over a post-release period. As with depression and anxiety, it is also unclear whether ex-prisoners leave their anger behind them when they are released. If not, anger may have a significant impact on reintegration, and it is for this reason that anger must be included in the investigation of reintegration. The present study addressed these issues.

Rationale, Aims, and Description of the Present Study

The need for a study like the present one is quite clear. The unprecedented number of prisoners returning to the community both nationally and internationally, and the high rates of recidivism, have precipitated widespread interest in the area of reintegration. The large number of prisoners returning to the community has significant implications for the community experiencing the effects of these prisoners undergoing the process of reintegration. Social costs to the community may include public health risks imposed by ex-prisoners, homelessness, disenfranchisement, weakened family structures and negative effects on community cohesion (Travis et al., 2001). Ex-prisoners are at high risk of failure given that these individuals are typically ill-equipped for life on the outside and have usually received insufficient assistance with reintegration. In Australia, the majority of releasees are reconvicted and returned to prison, usually within a few years. The concern over public safety is not unwarranted given that the high recidivism rates produce a large number of victims each year (Kesteren van, Mayhew, & Nieuwbeerta, 2000). There are also high rates of morbidity and mortality among ex-prisoners (Bird & Hutchinson, 2003), which means that ex-prisoners in Australia are at increased risk of death post-release, indicating an urgent need for continuing support during reintegration. There is also increasing

awareness of the economic costs to the community of not providing support for lifestyle change to break cycles of crime and dependency on community services.

Given these inter-related concerns, a balance needs to be established between promoting public safety on the one hand, and supporting the individual's transition from incarceration to a fully productive member of the community, on the other. Understanding, supporting, and improving the process of reintegration for ex-prisoners is clearly critical for promoting successful reintegration. Most prisoners returning to the community report a strong desire to succeed at the point of their release (Nelson et al., 1999). Promoting successful reintegration of ex-prisoners is, therefore, a significant and timely issue relevant to correctional services, the general community, and the individual returning to the community.

Emotional state of prisoners is recognised as an important element influencing behaviour and wellbeing. Despite the role that depression, anxiety, and anger may play in influencing behaviour, relatively few empirical studies have measured the emotional state of prisoners (e.g., Boothby & Durham, 1999; Cooper & Berwick, 2001; Wood & Newton, 2003), and of those that do exist, most have assessed functioning upon entry to prison. In fact, little research attention has been paid to examining the emotional state of prisoners in the critical period leading up to prison release, despite it being generally accepted as a stressful time for prisoners (Castellano & Soderstrom, 1997; Renzema, 1982). As well, only a handful of studies have examined type and extent of change in the emotional state of prisoners by tracking a sample of prisoners from pre-release and extending over a post-release phase, with most studies being outdated (e.g., Renzema, 1982). This is a significant oversight, as it is of critical importance to ascertain the pattern of emotional state in the first few months of community reintegration in order to understand ex-prisoners' relative strengths and weaknesses in coping with the stressors of returning to the community. It is also apparent that there has been little consideration of the factors that may predict depression, anxiety, and anger among ex-prisoners. The present study fills this gap by examining factors relevant to reintegration that may predict depression, anxiety, and anger among ex-prisoners. In other words, this study has examined how successful ex-prisoners have been in the process of reintegration, with particular attention to the relationship between emotional state of ex-prisoners and the multiple

inter-related variables that contribute to successful reintegration. These reintegration variables are conceptualised as falling within three ecological domains of intra-personal conditions, subsistence conditions, and support conditions, including for example, level and type of social support, housing and employment stability, and substance use.

The aim of the present investigation was to examine the multiple, complex, and dynamic variables influencing community reintegration of ex-prisoners by investigating the role of emotional state in the reintegration process. This was achieved by applying an ecological model of community reintegration of ex-prisoners. First, the type and degree of change in emotional state of participants was examined from pre-release to 1-4 weeks post-release, and extending over the first few months of reintegration. Second, the interactive nature of emotional state to numerous reintegration variables was examined. Participants were 101 prisoners who were approaching release from prison. The first instrument was a questionnaire for prisoners approaching release focusing on their background, in-prison experiences, and expectations for release. The second instrument was a questionnaire for ex-prisoners who are currently in the process of reintegration, focusing on the main variables related to their return to the community. In addition to these measures of reintegration, three measures of emotional state were appended to the pre-release questionnaire and the post-release questionnaire – the Beck Depression Inventory – II (BDI-II; Beck, Steer, & Brown, 1996), the Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988; Beck & Steer, 1990), and the State-Trait Anger Expression Inventory-2 (STAXI-2; Spielberger, 1988; Spielberger, 1999). The two questionnaires incorporating the measures of depression, anxiety, and anger were administered to participants in the month prior to prison release, and again at 1-4 weeks and 3-4 months following their release from prison.

Hypotheses

In terms of change over time, it was hypothesised that:

- scores for depression, anxiety, and anger would be significantly higher at pre-release than at both post-release points, indicative of increased depression, anxiety, and anger prior to prison release; and

- depression, anxiety, and anger scores would be significantly higher at 3-4 months post-release than at 1-4 weeks post-release, indicative of increased depression, anxiety, and/or anger over the post-release period.

In terms of the strength of relationship (interactivity) between emotional state and the main reintegration variables at each post-release point, it was generally expected that:

- higher scores on emotional state reflecting higher depression, anxiety, and anger would be associated with reduced success in reintegration;
- more specifically, lower ratings of physical and psychological health, increased substance use, reduced social support, lower finances, and reduced stability in both housing and employment were expected to predict increased depression, anxiety, and anger;
- older participants and male participants were expected to have lower depression and anxiety than their counterparts;
- female participants and older participants were expected to have lower anger than their counterparts; and
- participation in pre-release planning and post-release support programs were expected to be predictive of lower scores on the emotional state inventories following release, indicative of a positive effect associated with participation.

Method

Participants

The sample comprised 72 male and 29 female adult prisoners with a projected prison release date of approximately one month. Participants were only included if they had normal intelligence (IQ score of 70 or above) as assessed by the criminal justice system upon entry to prison, and at least eight years of formal education. All participants had English as their primary language. The participants were recruited from eight prisons on the outskirts of Melbourne and four prisons in Queensland.

Ages ranged from 18 to 61 years for the prisoner participants ($M = 34.89$, $SD = 9.66$), with the majority (71%) males. The majority of the prisoner participants (71%) had not completed high school. Among the prisoner sample, the average highest level of education of those who had not completed high school was Year 9 ($M = 9.76$, $SD = 1.55$). At the time of their arrest, the large majority of participants were either married or in a de facto relationship (50%) or had never been married/were not living with their partner (31%).

One hundred and one participants were interviewed in prison approximately one month prior to prison release. Of this group, 47 participants were interviewed within the first month of release which corresponds to a 47 percent retention rate. Of the original 101 prisoners, 19 participants were interviewed at 3-4 months post-release which corresponds to a retention rate of 19 percent. Although the retention rate was quite low, it is typical for longitudinal studies with this population (see La Vigne et al., 2004; see also Nelson et al., 1999).

Instruments

Pre-release Questionnaire

There were 10 sections in the pre-release questionnaire. The questionnaire included 76 questions that focused on participant background (e.g., age, ethnicity, education level); prison services, health care; housing conditions prior to incarceration and anticipated housing conditions upon release; employment, training, and finance; support from family and friends; drug and/or alcohol use prior to incarceration; preparation for release; general questions; and contact information.

Post-release Questionnaire

There were 10 sections in the post-release questionnaire administered at 1-4 weeks post-release (incorporating 63 questions) and nine sections in the post-release questionnaire administered at 3-4 months post-release (incorporating 58 questions). The post-release questionnaire focused on the same issues as those addressed in the pre-release questionnaire (apart from prison-specific questions); however, the questions pertained to the respondent's present situation in the community. The sections included release information; housing conditions upon release; employment conditions, education, and training; health care; financial conditions; contact with family and friends; drug and/or alcohol use; participation in post-release programs; criminal activity, supervision and reporting; and general questions.

Beck Depression Inventory-II

The BDI-II is a 21-item self-report measure that is used to assess the presence and severity of depressive symptoms in adolescents and adults. The 21 items of the BDI-II cover cognitive, affective, and behavioural symptoms of depression. Each item is assessed by selecting one of four responses (ranging from 0 to 3) that best describe how the individual has been feeling over the previous two weeks (including the present day). BDI-II cut-off scores are provided for distinguishing minimal (or normal) depression (0 - 13), mild depression (14 - 19), moderate depression (20 - 28), and severe depression (29 - 63) (see Beck et al., 1996).

Beck Anxiety Inventory

The BAI is a 21-item self-report measure for measuring severity of generalised anxiety in adolescents and adults. The BAI represents somatic and subjective aspects of anxiety. Participants are asked to indicate how much each of the 21 symptoms has been problematic for them over the prior week (including the present day) on a four-point scale ranging from zero ('not at all') to three ('severely'). Cut-off scores distinguish a normal level of anxiety (0 – 9); mild to moderate anxiety (10 - 18); moderate to severe anxiety (19 – 29); and severe anxiety (30 – 63) (see Beck & Steer, 1990).

State-Trait Anger Expression Inventory-2

The STAXI-2 is a self-report instrument that provides quantitative measurement of the experience of anger, anger expression, and control of anger for adolescents and adults (Spielberger, 1999). The STAXI-2 contains 57 items measured on a four-point Likert-type scale that are organised into scales that provide measures of state anger, trait anger, and anger expression. State and trait anger were only included for analysis in this study. The state anger scale (S-Ang) contains 15 items. The scale is designed to measure the intensity of a person's feelings of anger along a continuum varying from little or no anger, to mild irritation, to highly emotionally charged states, such as intense rage, and the extent to which an individual feels like expressing their anger at a particular point in time (Spielberger, 1996). State anger is viewed as a transient emotional state. Statements are prefaced with the phrase 'How I feel right now', after which participants rate how characteristic each item is for them on a four-point Likert-type scale (1 = 'not at all' to 4 = 'very much so'), with a higher score indicative of more intense feelings of anger at the time of testing. The range of responses for the state anger scale is 15–60.

Trait anger is conceived as a relatively stable personality trait. The trait anger scale (T-Ang) contains 10 items and is designed to measure how often feelings of anger are experienced over time. Statements are prefaced with the phrase 'How I generally feel', after which participants rate how characteristic each item is for them on a four-point Likert-type scale (1 = 'almost never' to 4 = 'almost always'), with a higher score indicative of more frequent feelings of anger. The range of responses for the trait anger scale is 10–40.

In terms of scoring, specific items on the STAXI-2 are summed in order to yield scores for the state anger and trait anger scales. The participant's raw scale scores provide a measure of the number of items on a specific scale that are scored in the pathognomic, or pathology indicating, direction. In addition to analysis of raw scores, analysis and interpretation of the STAXI-2 scales is also based on percentiles and/or T scores based on the individual's age and gender. A T score of 65 or more is considered clinically significant on the STAXI-2, which equates to 1.5 standard deviation units above the STAXI-2 standardisation sample mean, indicating a need for follow-up evaluation. As well, those individuals that display T scores of 60 to 64 on

two or more scales or subscales are identified as meeting the criteria for follow-up evaluation. In terms of percentile ranks, individuals scoring at the 75th percentile and higher have been reported as more likely to experience and/or express angry feelings (Spielberger et al., 2004); this translates into anger-management problems that may have serious negative outcomes (Deffenbacher et al., 1996; Spielberger, 1996), making these individuals suitable candidates for anger-management treatment. Scores that fall between the 25th and 75th percentiles on the individual STAXI and STAXI-2 scales are in the normal range.

Procedure

Identification of prospective participants and provision of background information on those who volunteered to participate was managed through collaboration with Corrections Victoria. A project officer from a prisoner support agency identified prospective participants who were approaching release (within 4 weeks of the anticipated release date) and who met the eligibility requirements for inclusion.

The pre-release questionnaire was completed side-by-side with the participant in a quiet room in the prison. Each question was read aloud to the participant and the response recorded by the interviewer. Upon prison release, the participant was contacted by telephone or mail (for those without a telephone) in order to arrange an interview. The post-release questionnaires were conducted either in-person or over the telephone, with each question read aloud and the scales described. The pre-release and post-release questionnaires took approximately 45 minutes to complete.

Management of Missing Values and Data Analysis

High dropout rates are common in research involving the tracking of prisoners following their prison release (see La Vigne et al., 2004; see also Nelson et al., 1999). In order to accommodate for missing data due to discontinuation of participation in the post-release period, a frequently employed and statistically sound data imputation method called the Expectation-Maximization (EM) algorithm (e.g., Allison, 2002) was applied. The EM algorithm provides consistent estimates of missing data by modelling the marginal estimation of the response variable(s) with respect to variances and co-variances specified over repeated measurements. Analyses of variance and multiple regression analysis were the techniques used for data analysis.

30

Our original intention was to use Structural Equation Modelling to examine the association of depression, anxiety, and anger to the main reintegration variables (including social support, housing, employment, and so on), in order to understand how these factors contribute to successful reintegration. This statistical technique would have enabled development of a statistically robust model of successful reintegration of ex-prisoners. Despite the best efforts of numerous support agencies in Queensland to increase the participant pool by 60 individuals in order to achieve a total sample size of 140 participants across the three testing points, participation was relatively low ($N = 101$). As a result, the sample size was not increased sufficiently to enable Structural Equation Modelling to be conducted. As an alternative, the EM algorithm was applied to increase the data points available at each post-release point, and subsequently, multiple regression procedures were undertaken to examine predictive relationships between emotional state and other reintegration variables for ex-prisoners.

Results

Change in Depression, Anxiety, and Anger Over Time

As depression, anxiety, and anger were measured at three points in time, but complete observations were not available for some participants, the EM algorithm was applied to provide maximum likelihood estimates of the missing data. As a result, the data set used for analysis contained full data points for the 101 participants. Means and standard deviations for the BDI-II, BAI, and STAXI-2 are presented in Table 1.

Table 1

Means and Standard Deviations (In Brackets) for the BDI-II , BAI, and STAXI-2 at Pre-release (N = 101), 1-4 Weeks Post-release (N = 101), and 3-4 Months Post-release (N = 101)

	Pre-release	1-4 weeks Post-release	3-4 months Post-release
	M (SD)	M (SD)	M (SD)
BDI-II	13.18 (9.06)***	6.89 (4.78)***	8.12 (6.94)***
BAI	6.15 (7.48)	6.79 (6.77)	6.68 (5.39)
STAXI-2			
State Anger	16.44 (3.12)**	15.91 (1.08)**	15.39 (0.51)**
Trait Anger	17.51 (7.22)*	16.49 (5.64)*	17.36 (5.09)*

Note. Mean scores were compared over the three time points.

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

** statistically significant at p<.01.

*statistically significant at p<.05.

According to the suggested criteria (Beck et al., 1996), the mean depression scores at pre-release and both post-release points fall within the minimal range of depression. A repeated measures ANOVA on the mean BDI-II scores revealed a significant main effect for time (pre-release/1-4 weeks post-release/3-4 months post-release), $F(2, 122) = 103.15$, $p < .001$. As hypothesised, the mean BDI-II score was significantly higher at pre-release ($M = 13.18$) than at either 1-4 weeks ($M = 6.89$) or 3-4 months post-release ($M = 8.12$). Consistent with the hypothesis that depression scores would

increase over the post-release period, there was a significant increase in depression at 3-4 months post-release from that reported at 1-4 weeks post-release.

The mean anxiety scores at pre-release and both post-release points fall within the normal range of anxiety. A repeated measures ANOVA on the mean BAI scores showed no significant main effect for time (pre-release/1-4 weeks post-release/3-4 months post-release), $F(2, 161) = 1.38$, $p = .25$. Contrary to the hypothesis that anxiety would be significantly higher at pre-release than over the post-release period, anxiety was low and in the normal range regardless of whether in prison ($M = 6.15$) or released (1-4 weeks post-release: $M = 6.79$; 3-4 months post-release: $M = 6.68$).

The mean state anger and trait anger scores at pre-release and both post-release points fall within the normal range. A repeated measures ANOVA on the mean state anger scores revealed a significant main effect for time (pre-release/1-4 weeks post-release/3-4 months post-release), $F(2, 112) = 8.85$, $p < .01$. There was partial support for the hypothesis. State anger was significantly higher at pre-release than at 3-4 months post-release; however, the state anger mean at 3-4 months ($M = 15.39$) was significantly lower than that reported at 1-4 weeks post-release ($M = 15.91$). This finding indicated that, while state anger scores were in the normal range, intensity of anger progressively reduced from pre-release and over the period of reintegration.

A repeated measures ANOVA on the mean trait anger scores revealed a significant main effect for time (pre-release/1-4 weeks post-release/3-4 months post-release), $F(2, 130) = 4.61$, $p < .05$. There was partial support for the hypothesis. Results indicated that trait anger was significantly higher at pre-release ($M = 17.51$) than 1-4 weeks post-release ($M = 16.49$). As hypothesised, trait anger increased significantly over the post-release period. This finding indicated that, while scores were in the normal range, more frequent episodes of anger were experienced at pre-release than upon initial release, with the frequency of anger increasing over the post-release period.

Proportion of Participants Scoring within each Level of Depression, Anxiety, and Anger

The proportion of participants scoring within each level of depression and anxiety was also determined as shown in Table 2.

Table 2

Proportion of Participants at each Level of Depression (BDI-II) and Anxiety (BAI) at Pre-release and each Post-release Period

	Pre-release	1-4 weeks Post-release	3-4 months Post-release
	%	%	%
BDI-II			
Minimal	64.4	82.0	78.0
Mild	13.9	12.0	8.0
Moderate	14.9	6.0	12.0
Severe	6.9	0.0	2.0
BAI			
Normal	79.2	78.0	78.0
Mild-Moderate	11.9	16.0	10.0
Moderate-Severe	6.9	6.0	12.0
Severe	2.0	2.0	0.0

As indicated in Table 2, almost two thirds of participants (64%, N = 101) reported depression in the minimal range while in prison. At 1-4 weeks post-release, a higher proportion of participants reported depression in the minimal range (82%); this was also the case at 3-4 months post-release. In terms of anxiety, the majority of participants reported anxiety in the normal range while in prison (79%, N = 101); this was also the case at 1-4 weeks (78%) and 3-4 months (78%) post-release. Gender breakdowns are not provided in this report, but may be obtained from the authors upon request.

Table 3 presents the proportion of participants with T-scores on the STAXI-2 scales or subscales in the clinical range for participants at pre-release, 1-4 weeks post-

release, and 3-4 months post-release. At pre-release, 14 percent of participants had two or more T-scores on the STAXI-2 scales or subscales in the range of 60 to 64, indicating the need for further evaluation. An additional 53 percent of participants had at least one T-score of 65 or higher on the STAXI-2 scales or subscales; once again, suggesting the need for further evaluation. Over one-third (44%) of participants were in the lower quartile for trait anger indicating low anger, and 23 percent were in the upper quartile for trait anger indicating high anger. In the post-release period, there were proportionately fewer participants who reported T scores above 60. As well, there were proportionately fewer participants who reported high trait anger, indicating possible beneficial effects associated with release.

Table 3

Proportion of Participants with T-Scores on the STAXI-2 Scales or Subscales in the Clinical Range at Pre-release (N = 101), 1-4 Weeks Post-release (N = 101), and 3-4 Months Post-release (N = 101)

	Pre-release	1-4 weeks Post-release	3-4 months Post-release
Two or more T-scores 60-64[a]	14%	10%	6%
One or more T-score(s) 65+[a]	53%	17%	16%
Low Trait Anger[b]	44%	45%	27%
High Trait Anger[c]	23%	6%	19%

Note: [a] on the scales or subscales; [b] lower quartile for trait anger; [c] upper quartile for trait anger

Relationship between Emotional State and Other Reintegration Variables
Correlation between depression, anxiety, and anger
Pearson correlations were conducted between the total scores for the BDI-II, BAI, and the state anger scale of the STAXI-2 for those participants interviewed at 1-4 weeks and 3-4 months post-release. There was a significant positive correlation between BDI-II scores and both the BAI scores ($r = .68$, $p < .001$) and state anger scores ($r = .44$, $p < .001$) reported at 1-4 weeks, indicating that a strong association between feelings of depression and anxiety, and between depression and current anger. As well, there was a significant positive correlation between scores on the BAI and both

state anger (r = .44, p<. 001) and trait anger (r = .23, p<. 05) scores. Likewise, there was a significant positive correlation between scores on the BDI-II and both BAI (r = .67, p<. 001) and state anger scores (r = .22, p<. 05) at 3-4 months post-release.

Inter-Correlations between the three emotional states and the other reintegration variables

Inter-correlations between the total scores for the BDI-II, BAI, and state anger scale of the STAXI-2 with the main reintegration variables relevant to reintegration at 1-4 weeks are presented in Tables 4 to 6. The reintegration variables identified in these tables related to the variables used in the regression analyses that follow. Specifically, there were 21 predictor variables, incorporating four demographic variables (gender, age, marital status, and highest level of education), four support variables (participation in a pre-release planning program, participation in prison programming, participation in a post-release support program, and straight/supervised release), and 13 variables assessing the post-release experiences of ex-prisoners either since release (1-4 week questionnaire) or over the prior month (3-4 month questionnaire). The 13 variables were:

➢ the proportion of time spent in stable housing

➢ the proportion of time spent in employment

➢ the total number of people who had provided the participant with support

➢ level of practical support provided by significant others

➢ level of emotional support provided by significant others

➢ amount of money that the participant had to live on per fortnight

➢ reported impact of lack of money on their lifestyle

➢ rating of current physical health

➢ rating of current psychological health

➢ number of drugs used

➢ number of times drunk alcohol

➢ number of alcoholic drinks consumed in a drinking session

➢ the number of times the participant had used drugs

Inspection of Tables 4 to 6 shows that there were several significant inter-correlations between the BDI-II/BAI/State Anger scores with those variables identified above. At

1-4 weeks post-release, there was a significant negative correlation between BDI-II scores and both level of practical support (r = -.28, p < .05) and emotional support (r = -.26, p < .05), indicating that higher depression was associated with a reduction in perceived levels of practical and emotional support. Higher depression at 1-4 weeks post-release was also associated with both a lower physical health rating (r = -.25, p < .05) and a lower psychological health rating (r = -.41, p < .01), indicative of poorer health; this was also the case at 3-4 months post-release.

Similarly, at 1-4 weeks post-release, there was a significant negative correlation between BAI scores and ratings of both physical (r = -.31, p < .05) and psychological health (r = -.36, p < .01), indicating that higher anxiety was associated with a reduction in health ratings (i.e., poorer health). Higher anxiety was also associated with an increase in the total number of support people (r = -.27, p < .05) at 1-4 weeks post-release. As expected, level of perceived practical support and emotional support were positively correlated at both points in time; as were ratings of physical and psychological health. Of interest, there was also a significant negative correlation between age and both BDI-II scores and BAI scores at both points in time, indicating that higher age was associated with lower depression and anxiety. State anger was also significantly associated with several variables at 1-4 weeks post-release, including age (r = -.24, p < .05) and the total number of support people (r = .30, p < .05).

At 1-4 weeks post-release, there was a significant positive correlation between the proportion of time spent in employment with both money available (r = .72, p < .001) and the frequency of drinking (r = .45, p < .001), supporting first, the monetary benefits of continuous employment, and second, the downside of having more money (i.e., an increase in the frequency of drinking). Perhaps not surprisingly, the number of drugs used at 1-4 weeks post-release was positively correlated with frequency of drug use (r = .47, p < .001). Moreover, at 1-4 weeks post-release, the number of drinks consumed in a session was positively correlated with both number of drugs used (r = .52, p < .001) and frequency of drug use (r = .38, p < .01), supporting a cross-over in drug and alcohol use among participants. This association was also apparent at 3-4 months post-release.

38

Table 4

Inter-Correlations for Emotional State (Depression, Anxiety, State Anger) and the Main Variables Relevant to Reintegration for the Ex-Prisoner Sample at 1-4 Weeks Post-release

Variables	1.	2.	3.	4.	5.	6.	7.	8.
1. BDI-II				-0.25*	-0.41**	-0.28*	-0.26*	0.19
2. BAI				-0.31*	-0.36**	-0.14	-0.08	0.27*
3. State Anger				-0.21	-0.22	-0.07	-0.00	0.30*
4. Phys. Hth.					0.43***	0.32*	0.26*	-0.08
5. Psych. Hth.						0.41**	0.32*	-0.03
6. Prac. Supp.							0.75***	0.14
7. Emot. Supp.								0.25*
8. No. Supp.								

Note. 1. BDI-II total score; 2. BAI Total Score; 3. State Anger Total Score; 4. Physical Health Rating; 5. Psychological Health Rating; 6. Level of Practical Support; 7. Level of Emotional Support; 8. Total Number of Support People.
 *p < .05. **p < .01. ***p < .001.

Table 5

Inter-Correlations for Emotional State (Depression, Anxiety, State Anger) and the Main Variables Relevant to Reintegration for the Ex-Prisoner Sample at 1-4 Weeks Post-release

Variables	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
1. BDI-II	0.07	0.28*	-0.23	-0.20	0.04	0.13	0.02	0.05	-0.34**	0.09
2. BAI	0.10	0.30*	-0.16	-0.17	-0.02	0.19	0.01	0.12	-0.28*	-0.12
3. State Anger	-0.22	0.23	-0.13	-0.00	0.09	0.21	0.01	0.12	-0.24*	-0.05
4. Phys. Hth.	0.02	-0.18	0.19	0.26*	-0.14	-0.01	0.16	-0.02	-0.16	0.03
5. Psych. Hth.	0.04	-0.15	0.06	0.07	-0.11	-0.04	0.04	-0.08	-0.04	0.00
6. Prac. Supp.	-0.38**	-0.09	-0.16	0.01	-0.20	0.14	-0.07	-0.07	0.01	0.01
7. Emot. Supp.	-0.31*	-0.09	-0.07	0.03	-0.16	0.07	-0.02	-0.04	-0.12	0.15
8. No. Supp.	-0.30*	-0.03	-0.31*	0.04	-0.19	0.02	-0.19	-0.06	0.00	0.20

Note. 9. Money Available Per Fortnight; 10. Impact of Lack of Money; 11. Proportion of Time in Employment; 12. Proportion of Time in Housing;
13. Number of Drugs Used; 14. Average Number of Times Use Drugs Per Month; 15. Frequency of Drinking (Number of Times in Prior Month); 16. Number of Drinks in a Session; 17. Age; 18. Highest year Level in High School.
*$p < .05$. **$p < .01$. ***$p < .001$.

Table 6

Inter-Correlations for Emotional State (Depression, Anxiety, State Anger) and the Main Variables Relevant to Reintegration for the Ex-Prisoner Sample at 1-4 Weeks Post-release

Variables	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
9. Money Av.		-0.07	0.72***	0.15	0.14	0.04	0.34**	0.15	-0.14	0.15
10. Lack Money			-0.19	-0.32*	0.16	0.19	-0.03	0.46***	-0.23	-0.13
11. Prop. Emp.				0.29*	0.14	-0.09	0.45***	0.12	-0.09	0.07
12. Prop. Hous.					-0.02	0.00	-0.21	-0.33**	0.15	0.28*
13. No. Drugs						0.47***	0.25*	0.52***	-0.20	-0.03
14. No. Times Drugs							0.02	0.38**	-0.30	-0.06
15. No. Times Drink								0.29*	-0.22	-0.03
16. No. Drinks Sess.									-0.36**	-0.18
17. Age										0.04
18. Educ. Level										

Note. 9. Money Available Per Fortnight; 10. Impact of Lack of Money; 11. Proportion of Time in Employment; 12. Proportion of Time in Housing;
13. Number of Drugs Used; 14. Average Number of Times Use Drugs Per Month; 15. Frequency of Drinking (Number of Times in Prior Month); 16. Number of Drinks in a Session; 17. Age; 18. Highest year Level in High School.
*p < .05. **p < .01. ***p < .001.

Inter-correlations between the total scores for the BDI-II and BAI with the main reintegration variables relevant to reintegration at 3-4 months are presented in Tables 7 to 9. Inspection of Tables 7 to 9 shows that there were several significant inter-correlations; the most relevant are elaborated below. At 3-4 months post-release, BDI-II scores were negatively correlated with level of practical support ($r = -.42$, $p < .01$) and positively correlated with level of emotional support ($r = .29$, $p < .05$); while BAI scores were negatively correlated with level of practical support ($r = -.34$, $p < .05$) and the total number of support people ($r = -.29$, $p < .05$). At 3-4 months post-release, there was also a significant negative correlation between proportion of time spent in the same housing with both BDI-II scores ($r = -.40$, $p < .01$) and BAI scores ($r = -.40$, $p < .01$), indicating that less time spent in stable housing was associated with both higher depression and anxiety. This relationship was also apparent at 1-4 weeks post-release, but only in relation to depression.

Table 7

Inter-Correlations for Emotional State (Depression, Anxiety, State Anger) and the Main Variables Relevant to Reintegration for the Ex-Prisoner Sample at 3-4 Months Post-release

Variables	1.	2.	3.	4.	5.	6.	7.	8.
1. BDI-II				-0.29*	-0.38**	-0.42**	0.29*	0.20
2. BAI				-0.21	-0.43**	-0.34*	-0.27	-0.29*
3. State Anger				-0.20	-0.03	-0.15	-0.11	0.13
4. Phys. Hth					0.56***	0.21	0.07	0.06
5. Psych. Hth.						0.28*	0.23	0.40**
6. Prac. Supp.							0.83***	0.29*
7. Emot. Supp.								0.27*
8. No. Supp.								

Note. 1. BDI-II total score; 2. BAI Total Score; 3. State Anger Total Score; 4. Physical Health Rating; 5. Psychological Health Rating; 6. Level of Practical Support; 7. Level of Emotional Support; 8. Total Number of Support People.
 *p < .05. **p < .01. ***p < .001.

Table 8

Inter-Correlations for Emotional State (Depression, Anxiety, State Anger) and the Main Variables Relevant to Reintegration for the Ex-Prisoner Sample at 3-4 Months Post-release

Variables	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
1. BDI-II	0.01	0.21	-0.10	-0.40**	0.11	0.03	0.04	0.16	-0.41**	0.01
2. BAI	0.08	0.34*	-0.02	-0.40**	0.28*	0.14	0.00	0.35*	-0.34*	-0.29*
3. State Anger	-0.15	0.05	-0.15	0.08	-0.08	-0.08	-0.05	-0.05	-0.14	-0.18
4. Phys. Hth.	0.16	-0.10	0.24	0.19	-0.11	0.11	0.11	0.15	0.06	0.09
5. Psych. Hth.	-0.09	-0.41**	-0.07	0.15	-0.26	-0.10	0.06	-0.15	-0.01	-0.02
6. Prac. Supp.	-0.19	-0.19	-0.12	0.40**	-0.43**	-0.10	-0.47**	-0.37**	0.28*	0.12
7. Emot. Supp.	-0.35*	-0.02	-0.20	-0.21*	-0.50**	-0.47**	-0.44**	-0.46**	0.26*	0.18
8. No. Supp.	-0.17	-0.32*	-0.17	0.10	-0.32*	-0.09	-0.11	-0.34**	0.24*	0.21

Note. 9. Money Available Per Fortnight; 10. Impact of Lack of Money; 11. Proportion of Time in Employment; 12. Proportion of Time in Housing; 13. Number of Drugs Used; 14. Average Number of Times Use Drugs Per Month; 15. Frequency of Drinking (Number of Times in Prior Month); 16. Number of Drinks in a Session; 17. Age; 18. Highest year Level in High School.
$*p < .05.$ $**p < .01.$ $***p < .001.$

Table 9

Inter-Correlations for Emotional State (Depression, Anxiety, State Anger) and the Main Variables Relevant to Reintegration for the Ex-Prisoner Sample at 3-4 Months Post-release

Variables	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
9. Money Av.		-0.03	0.69***	0.01	0.08	0.28*	0.18	0.16	-0.06	0.15
10. Lack Money			-0.05	-0.15	0.06	-0.25	-0.21	0.24	-0.15	-0.09
11. Prop. Emp.				0.26	0.08	0.24	0.25	0.23	-0.05	0.19
12. Prop. Hous.					-0.21	-0.10	-0.21	-0.17	0.34*	0.44**
13. No. Drugs						0.54***	0.51***	0.75***	-0.25	-0.31*
14. No. Times Drugs							0.29*	0.61***	-0.07	-0.10
15. No. Times Drink								0.29*	-0.16	-0.09
16. No. Drinks Sess.									-0.35*	-0.27
17. Age										0.15
18. Educ. Level										

Note. 9. Money Available Per Fortnight; 10. Impact of Lack of Money; 11. Proportion of Time in Employment; 12. Proportion of Time in Housing; 13. Number of Drugs Used; 14. Average Number of Times Use Drugs Per Month; 15. Frequency of Drinking (Number of Times in Prior Month); 16. Number of Drinks in a Session; 17. Age; 18. Highest year Level in High School.
*p < .05. **p < .01. ***p < .001.

Regression analyses: Factors that predict depression and anxiety among ex-prisoners

Backwards stepwise multiple regressions were conducted to identify the factors that predict depression, anxiety, and anger among ex-prisoners. This information can assist support workers to identify ex-prisoners who are at risk of elevated levels of depression, anxiety, and/or anger, and to inform program development and support for ex-prisoners who are undergoing the process of reintegration. As reported earlier, there were 21 predictor variables, incorporating four demographic variables (gender, age, marital status, and highest level of education), four support variables (participation in a pre-release planning program, participation in prison programming, participation in a post-release support program, and straight/supervised release), and 13 variables assessing the post-release experiences of ex-prisoners.

To examine the strength of relationship between depression and the main outcome variables influencing reintegration, two backwards stepwise multiple regression analyses were conducted with the criterion and predictor scores relating to either 1-4 weeks post-release (1st multiple regression) or 3-4 months post-release (2nd multiple regression). The results of the two multiple regressions are shown in Table 10.

As indicated in Table 10, four variables were the best predictors of depression scores at 1-4 weeks post-release. The one predictor variable that was positively correlated with depression at 1-4 weeks post-release was participation in a post-release support program(s). This variable was associated with the greatest change in depression scores, increasing depression by approximately four points (B = 3.92). The three predictor variables that were negatively correlated with depression at 1-4 weeks post-release were the average level of emotional support, rating of psychological health, and age, with each of these variables associated with only a small reduction in depression scores.

Four variables were the best predictors of depression at 3-4 months post-release. Of these, one predictor variable was positively correlated with depression at 3-4 months post-release. This was participation in a post-release support program(s). This variable was associated with the greatest change in depression scores, increasing depression by eight points (B = 8.52). The three predictor variables that were negatively correlated

46

with depression at 3-4 months post-release were age, average level of practical support, and rating of psychological health, with the latter variable associated with a three point reduction in depression (B = -3.36).

Table 10

Regression for Predicting Depression at 1-4 Weeks Post-release and 3-4 Months Post-release

Predictor variables	B	SE B	ß	p
1-4 weeks post-release[a]				
Age	-0.24	0.07	-0.41	.001**
Rating of psychological health	-1.76	0.61	-0.35	.006**
Post-release support program participation	3.92	1.49	0.31	.012*
Average level of emotional support	-1.27	0.61	-0.26	.043*
3-4 months post-release[b]				
Post-release support program participation	8.52	1.86	0.51	.000***
Age	-0.37	0.10	-0.46	.000***
Rating of psychological health	-3.36	1.18	-0.35	.008***
Average level of practical support	-1.70	0.71	-0.29	.022*

* statistically significant at p<.05.

** statistically significant at p<.01.

*** statistically significant at p<.001.

[a] $R^2 = 0.41$, $F_{(4,45)} = 7.91$, p < .001.

[b] $R^2 = 0.61$, $F_{(5,33)} = 10.50$, p < .001.

Examination of the R^2 values indicated that four variables were the strongest predictors of depression at 1-4 weeks post-release, accounting for 41 percent of the total variance in depression scores. These results indicated that lower depression at 1-4 weeks post-release was related to a higher perceived level of emotional support from significant others, improved psychological health, and higher age (i.e., older participants). Higher depression at 1-4 weeks post-release was related to participation in a post-release support program(s). Four variables were the strongest predictors of depression at 3-4 months post-release, accounting for 61 percent of the total variance in depression scores. These results indicated that lower depression at 3-4 months post-release was related to higher age, a higher level of practical support, and improved

psychological health. Of interest, higher depression at 3-4 months post-release was related to participation in a post-release support program.

The next two backwards stepwise multiple regressions included the total BAI scores as the criterion variable and the 21 predictor variables, with the criterion and predictor scores relating to either 1-4 weeks post-release (1st multiple regression) or 3-4 months post-release (2nd multiple regression). The results of the multiple regressions are shown in Table 11. Three variables were the best predictors of anxiety at 1-4 weeks post-release. The one predictor variable that was positively correlated with anxiety at 1-4 weeks post-release was the total number of support people identified by participants. The two predictor variables that were negatively correlated with anxiety at 1-4 weeks post-release were age and the average rating of psychological health, with the latter variable was associated with the greatest change in anxiety, in this case, a two point reduction in anxiety (B = -2.35). In contrast, four variables were the best predictors of anxiety at 3-4 months post-release. Of these, the one predictor variable that was positively correlated with anxiety at 3-4 months post-release was participation in a post-release support program, and this variable was associated with the greatest change in anxiety (B = 4.74). The three predictor variables that were negatively correlated with anxiety at 3-4 months post-release were age, highest level of education, and the average rating of psychological health, with the latter associated with the greatest reduction in anxiety; in this case, three points (B = -3.37).

Table 11

Regression for Predicting Anxiety at 1-4 Weeks Post-release and 3-4 Months Post-release

Predictor variables	B	SE B	ß	p
1-4 weeks post-release[a]				
Rating of psychological health	-2.35	0.80	-0.37	.005**
Age	-0.22	0.10	-0.29	.024*
Total number of support people	1.06	0.52	0.26	.045*
3-4 months post-release[b]				
Rating of psychological health	-3.37	1.03	-0.41	.002**
Age	-0.24	0.09	-0.35	.010*
Post-release Support Program Participation	4.74	1.77	0.34	.011*
Highest Level of Education	-1.22	0.55	-0.28	.032*

* statistically significant at p<.05.

** statistically significant at p<.01.

[a] $R^2 = 0.28$, $F_{(3, 46)} = 6.05$, $p < .001$.

[b] $R^2 = 0.48$, $F_{(4, 34)} = 7.79$, $p < .001$.

Examination of the R^2 values indicated that three variables were the strongest predictors of anxiety at 1-4 weeks post-release, accounting for 28 percent of the total variance in anxiety scores. These results indicated that lower anxiety at 1-4 weeks post-release was related to higher age and a higher psychological health rating, indicative of better mental health. Higher anxiety at 1-4 weeks post-release was related to a greater number of support people. Thus, when more support people were identified by the participants, level of anxiety was higher. Four variables were the strongest predictors of anxiety at 3-4 months post-release, accounting for 48 percent of the total variance in anxiety scores. These results indicated that lower anxiety at 3-4 months post-release was related to improved psychological health, higher age, and a higher level of education. Of interest, higher anxiety at 3-4 months post-release was related to participation in a post-release support program.

Given that there were only a limited number of regression analyses that could be conducted to assess the relationship between emotional state and the main variables

influencing reintegration, only one measure of anger was included for further analysis. Of the two anger variables examined in the study (state anger, trait anger), state anger was selected for additional analysis, because the focus of the study is on the effects of more or less immediate conditions on emotional state. State anger reflects temporary effects on anger while trait anger is conceived of as a general predisposition to anger, and as such, is viewed as less susceptible to the effects of immediate conditions.

The next two backwards stepwise multiple regressions included total state anger scores on the STAXI-2 as the criterion variable, and the 21 predictor variables identified above, with the criterion and predictor scores relating to either 1-4 weeks post-release (1st multiple regression) or 3-4 months post-release (2nd multiple regression). As shown in Table 12, one variable was the best predictor of state anger scores at 1-4 weeks post-release, accounting for 26 percent of the total variance in state anger scores.

Table 12

Regression for Predicting State Anger at 1-4 Weeks Post-release

Predictor variables	B	SE B	ß	p
1-4 weeks post-release[a]				
Age	-0.05	0.02	-0.32	.02*

* statistically significant at p<.05.

[a] $R^2 = 0.26$, $F_{(4, 45)} = 3.99$, p < .01.

Age was negatively correlated with state anger at 1-4 weeks post-release, producing a negligible effect on state anger (B = -0.05). Thus, participants who were older had a lower level of state anger at 1-4 weeks post-release. There were no predictors of state anger at 3-4 months post-release, $R^2 = 0.00$.

Discussion

The study reported here examined multiple interactive variables that influence community reintegration of ex-prisoners, with specific attention to the role of emotional state in the reintegration process. This was achieved by applying an ecological model of community reintegration of ex-prisoners. First, the type and degree of change in depression, anxiety, and anger of participants was examined from pre-release to 1-4 weeks post-release, and extending over the first few months of reintegration. Second, the interactive nature of depression, anxiety, and anger with numerous reintegration variables was examined in order to identify the main factors that are associated with depression, anxiety, and anger among ex-prisoners. This analysis enabled a focus on conditions critical to successful reintegration for ex-prisoners.

Change in Depression, Anxiety, and Anger Over Time

While mean scores for depression, anxiety, and anger fell in the normal range at pre-release and both post-release periods, it was notable and of some concern, that a relatively high proportion of participants experienced levels of depression, anxiety, and/or anger that were beyond the normal range. Given that depression affects approximately one in six Australian males and one in three Australian females at any given time (Beyondblue 2005), and anxiety disorders are estimated to affect seven percent of men and 12 percent of women each year (Andrews, Hall, Teesson & Henderson 1999), it is clear that the figures for the present study are well above that reported in community samples.

The average level of depression was higher at pre-release than at both post-release points. This finding provided general support for the role of the prison environment in precipitating or maintaining negative mental health outcomes. Mean depression scores were lowest at 1-4 weeks following release and then rose again at 3-4 months post-release, suggesting that psychological adjustment to community reintegration is a long-term and fluctuating process. On average, anxiety levels remained low over the course of the study, although a fair proportion of prisoners self-reported anxiety beyond the normal range. This finding supports prior research indicating that the period leading up to release is a time of high stress for some individuals (Castellano &

Soderstrom 1997). Further investigation is needed to clarify the emotional effects of impending release on prisoners. The observation that anxiety levels may be elevated for a considerable time post-release for some individuals suggests that the period of reintegration is also associated with a range of stress-provoking conditions.

Mean scores for state anger and trait anger were in the normal range, and were comparable to that observed among community residents (e.g., Spielberger, 1999) and some prison samples (e.g., Suter, Byrne, Bryne, Howells, & Day, 2002). The unexpected result that anger scores were in the normal range, may suggest that participants had a generally low predisposition to anger. It is possible that participants approaching release are more likely to refrain from making angry outbursts, or to avoid confrontation, in order to minimise the likelihood of any incident impacting on their impending release. It is also possible that prisoners do have a generally low tendency toward anger in the weeks leading up to release, which may be related to generally positive expectations about impending release. Alternatively, the low anger scores may suggest that participants under-reported their anger, which is a criticism raised with respect to numerous self-report psychological instruments including those that assess anger (Simourd & Mamuza, 2000).

Reintegration Variables Associated with Depression, Anxiety, and Anger among Ex-prisoners

The second part of the study showed that there are a number of variables related to community reintegration that are associated with, and may contribute to, depression, anxiety, and anger among ex-prisoners and that the relative strength of influence of these variables changes over a period of reintegration. While there are some consistencies in the reintegration variables identified as related to depression, anxiety, and anger at 1-4 weeks and 3-4 months post-release, it is of practical significance that the contribution of these variables varies with time since release. Moreover, the contribution of reintegration variables was generally consistent. It is evident, therefore, that those variables identified as influencing "success" in community reintegration clearly play a role in the emotional state of ex-prisoners, and that the observed effects on emotional state change over a period of reintegration, indicating a need for focused post-release support (case management) that is able to meet the changing needs of ex-prisoners over a prolonged period of community reintegration.

52

Depression

The general hypothesis for this study was that higher depression would be associated with reduced success in reintegration in terms of lower ratings for physical and psychological health, increased substance use, reduced social support, lower finances, and reduced stability in both housing and employment. It was also expected that both older participants and male participants would have lower depression than their counterparts, and that participation in pre-release planning and post-release support programs would be predictive of lower depression following release. There was partial support for this hypothesis. Results showed that a high proportion of the variance in depression at 1-4 weeks post-release was attributed to four variables. Three of the four variables were associated with lower depression and one with high depression. The three variables associated with lower depression at 1-4 weeks following release included a higher perceived level of emotional support from significant others, improved psychological health, and higher age.

While traditional conceptions attribute a beneficial effect of social support on mental health outcomes generally, the relationship between social support and depression appears to be less clear (Biggam & Power, 1997; Cooper & Berwick, 2001; Hart, 1995), particularly when extended to prisoner and ex-prisoner samples. Hart (1995), for example, reported no significant relationship between level of in-prison social support and depression among prisoners, while Biggam and Power (1997) indicated that those prisoners classified as depressed reported lower levels of practical and/or emotional support from loved ones on the outside and fellow inmates. Like Biggam and Power (1997), the present findings suggest that social support may have a beneficial effect on level of depression of ex-prisoners, which may have broader positive implications for reintegration. Thus, perceived high levels in emotional support appear to produce positive benefits in terms of lower depression.

The finding that higher age was also associated with lower depression among the newly released prisoners is consistent with prisoner studies (Boothby & Durham, 1999) and clinical studies with a mixed diagnostic sample (Beck & Steer, 1993). It may be that older participants had a more mature outlook on life that allowed them to deal with the many challenges of release in a more positive way than the younger participants, potentially resulting in their lower level of depression in this study.

Alternatively, the life conditions of older participants may have been more stable than for younger participants, such that reintegration is more readily facilitated for them, positively impacting on psychological health. Age-related effects on reintegration outcomes other than emotional state are an avenue of future research that may reveal some insight into these issues.

While one might expect that engagement in post-release support programs such as drug and/or alcohol treatment, employment training and support, and housing support would be associated with lower depression, the opposite was true. The regression analyses showed that higher depression at 1-4 weeks following release was related to participation in one or more post-release support programs. This is an unexpected finding. There are two possible explanations for this outcome. It may be that the level of satisfaction with program engagement was low, or that program engagement did not produce desired outcomes, potentially impacting negatively on emotional state. However, another plausible explanation is that the life conditions of those participants seeking out post-release program support were less stable and less desirable. They may simply have had more need for assistance than those individuals who reported no engagement in post-release programs; that the three programs with the highest level of engagement were drug and/or alcohol support, job training, and general counselling supports this view.

Of interest, there was no relationship between gender and depression despite several studies that have shown higher rates of depression among female prisoners than male prisoners (Boothby & Durham, 1999; Varese et al., 1998), although being in the community post-release may have impacted in some way to ameliorate these effects. The smaller sample size of female participants may also have contributed to its lack of effect on depression. One might also have expected that the time spent in stable employment may have impacted on level of depression, but the brief time frame of 1-4 weeks following release may explain the lack of a significant effect.

There was some consistency in the conditions associated with depression at 3-4 months post-release. Of the four variables that were most strongly related to depression at 3-4 months post-release, three had also been identified as significantly related to the experience of depression in the 1-4 weeks following release. Lower

depression at 3-4 months post-release was related to a higher perceived level of practical support from significant others and higher age, while higher depression at 3-4 months post-release was related to participation in a post-release support program. These findings suggest that the factors that contributed to the experience of depression at 1-4 weeks post-release remained pervasive in the months following release. Clearly, a higher perceived level of practical support is important to mental health outcomes, indicating that continued support in the form of provision of food, money, housing, employment, and assistance with drug and/or alcohol treatment contributes to lower depression. At least for the present study, functional aspects of support (in this case perceived level of practical support) had a positive impact on depression. This finding is consistent with extant research indicating that functional aspects of support are more influential on various health outcomes than structural aspects (Cohen & Syme, 1985), although additional research with ex-prisoner samples is need to confirm these observations.

In addition, those participants who were older had continued lower depression. That post-release program participation was associated with higher depression in the weeks *and* months following release, points more to the vulnerability of the ex-prisoners engaged in the programs rather than the features of the programs impacting on level of depression. Most participants who were engaged in a post-release support program participated in substance use programs, and were therefore, dealing with addiction issues and the challenge of trying to stay drug free, a challenge that is clearly difficult to deal with over the longer term.

The one additional variable that was associated with depression at both 1-4 weeks and 3-4 months post-release was the average rating of psychological health. Lower levels of depression in the weeks and months following release was associated with improved psychological health ratings. Clearly, this makes good sense; participants who self-reported better psychological health were likely to have either fewer conditions of psychological ill-health or to report a reduced impact of existing conditions, including depression. The fact that vulnerable populations, including prisoners, may commonly under-report or minimise conditions of ill-health (Simourd & Mamuza, 2000) cannot be discounted, however, potentially impacting on the experience of depression.

Anxiety

The general hypothesis for this study was that higher anxiety would be associated with reduced success in reintegration. It was also expected that both older participants and male participants would have lower anxiety than their counterparts, and that participation in pre-release planning and post-release support programs would be associated with lower anxiety following release. There was only partial support for this hypothesis. Comparatively fewer variables contributed to anxiety at 1-4 weeks post-release than contributed to depression, with three identified variables accounting for only 28 percent of the variance in anxiety scores. One variable was associated with higher anxiety, and two with lower anxiety. The single variable associated with higher anxiety in the weeks following release was total number of support people. Contrary to perceptions of the beneficial effects of supportive relationships, this finding indicated that to have a larger number of supportive people was associated with higher anxiety among ex-prisoners. The two variables associated with lower anxiety at 1-4 weeks post-release were older age and a higher psychological health rating, with the latter indicative of better mental health. Like that for depression, it is reasonable to expect that lower anxiety would be associated with a higher psychological health rating. Quite simply, the better rating of psychological health, the lower the anxiety level of the participant, and given that these ratings were, on average, indicative of good to very good psychological health, this result is not surprising.

Given the low proportion of variance accounted for by the regression model, it is evident that there are other factors that contribute to anxiety levels of participants in the present study over the 1-4 weeks following release that were not accounted for by the selected predictor variables. In future, variables such as the number of housing moves, number of jobs, and number of physical and psychological health conditions may be useful to investigate for their potential impact on anxiety. It would also be useful to examine how various criminological variables may contribute to anxiety at post-release, such as type of offence, number of prior arrests and/or incarceration, and time served in prison.

The four variables that contributed to anxiety at 3-4 months following release accounted for a higher proportion of the variance in anxiety ($R^2 = 0.48$) than that observed at 1-4 weeks following release. This outcome gives greater confidence that

the selected variables were useful in identifying potential contributors to anxiety, although there may be several other variables that could be identified in future research that may increase the strength of the model. The two variables that had also been identified as important at 1-4 weeks following release were average rating of psychological health and age. Like that discussed above, lower anxiety at 3-4 months post-release was related to improved psychological health. As with depression results, older participants had lower anxiety in the months following release, which may relate to a more mature outlook and the likelihood that they had returned to a more settled lifestyle, most likely with the support of a spouse or partner. While prisoners have been identified as educationally disadvantaged in a range of national and international studies (e.g., Bearing Point, 2003; Fletcher, 2001; Haigler et al., 1994), it appears that the level of educational attainment may also be important to post-release outcomes. It follows that higher levels of education translate into higher qualifications and more advanced skill levels. That more educated participants had lower anxiety may suggest that these individuals had better post-release outcomes in terms of getting and maintaining a job, for example. As with depression results, higher anxiety at 3-4 months post-release was related to participation in a post-release support program. As suggested earlier, this finding, while unexpected, may be explained by the observation that most participants reporting engagement in a post-release support program were substance users attempting to deal with substance dependency issues, among a range of other competing demands.

Anger

As for depression and anxiety, the general hypothesis for this study was that higher anger would be associated with reduced success in reintegration. Female participants and older participants were expected to have lower anger than their counterparts, and participation in pre-release planning and post-release support programs were also expected to be predictive of lower anger scores following release. There was limited support for this hypothesis. Only one of the 21 associated variables contributed significantly to state anger at 1-4 weeks post-release. Given that the model only accounted for 26 percent of the total variance in state anger scores, it is apparent that additional variables not identified in the present study are largely responsible for the variance in these scores. As hypothesised, older participants had a lower level of state anger (i.e., intensity of anger) which may be related to their increased maturity, and

the possibility that they are returning to a more settled lifestyle. Of interest, no variables contributed significantly to the experience of state anger in the months following reintegration. The inclusion of additional variables may well have produced a contrary result, indicating the need for further research.

Theoretical Implications of the Present Study

The present investigation has contributed to prisoner rehabilitation-reintegration theory in at least two ways. One is that it strongly supports a shift away from the traditional view of rehabilitation in terms of the individual only and mainly in terms of skill deficits and character defects. Instead, this investigation calls for a focus on 'person-in-context' and has attempted to consider a full range of personal conditions and characteristics as well as including relevant environmental or contextual variables that may affect rehabilitation-reintegration outcomes. In doing so, it contributes to a broader perspective on rehabilitation-reintegration issues. The specific focus on emotional state adds greatly to this broad perspective. A second contribution to rehabilitation-reintegration theory is that it strongly supports a shift in attention from mainly pre-release transition and preparation programs and assistance to a model that takes a much longer term view of the reintegration process. Results of this investigation suggest that reintegration assistance should begin pre-release and extend for a period post-release that varies for individuals, generally lasting several months or possibly years. Recognition of the broad, often comprehensive needs of ex-prisoners, together with the recognition that those needs are often long-term is essential, in our view, to success in the reintegration process. In the present study, participation in pre-release programs was associated with higher depression, indicating greater rather than less difficulty for prisoners being "prepared" for release.

The present investigation also contributes to ecological systems theory in a number of ways including (1) application of the model to a new referent group and an issue not previously investigated (prisoner reintegration); (2) application of a simplified three-part ecological model; (3) inclusion of emotional state as a potentially important intra-personal variable (condition); and (4) investigation of both the dynamic nature of variables (conditions) and the interactivity (inter-relationships) among variables within an ecological system. The importance of incorporating change over time and interactivity between variables in future ecological systems models has been

58

emphasised. The demonstration of those two qualities in the present investigation constitutes a clear contribution to the advancement of ecological systems theory.

Practical Implications of the Present Study

The present investigation has several practical implications for ex-prisoner reintegration into the community. Those practical implications relate to corrections policy, program development, and program delivery. Reintegration barriers and support needs suggest what services are needed and how they should be delivered. Knowing when, how, in what ways, and for how long interventions and supports might be needed may contribute to success in forging a crime-free lifestyle and reducing recidivism.

Change in focus

The present investigation indicates that the traditional approach of 'patching the cracks' in the personality, behaviour, and skills of offenders in order to make them 'functional' human beings is not sufficient for improving reintegration outcomes. Rather, adopting a person-in-context approach, one that is based on ecological systems analysis, has the advantage of identifying the multiplicity of variables influencing an individual's reintegration, which has implications both for the way the transition/reintegration experience is structured for prisoners, as well as for the way we think about their rehabilitation. The ecological approach adopted in the present investigation clearly showed that the needs of ex-prisoners are very comprehensive and complex, and often change over time. Unmet needs and negative conditions often have a broad impact on several variables. Adjustment to life in the community is a typically slow process (Graffam et al., 2005) that embraces a realm of experiences falling within the three ecological domains of intra-personal conditions, subsistence conditions, and support conditions.

Attention by service providers and criminal justice personnel to the needs of ex-prisoners across all life domains, with particular focus on the inter-play between variables, provides context-specific information that would benefit community reintegration planning, as well as informing service planning and provision. For example, the elevated levels of depression, anxiety, and/or anger observed among approximately 20 percent of prisoners indicates an urgent need for improving access

to and availability of counselling programs that may address these needs, in addition to the many practical needs (e.g., housing and employment support) that require attention at different stages of community reintegration. Of course, there are very common basic needs for drug and alcohol treatment and education. A suggestion for improvement in cross-linkages and referral processes in service provision, such as those directed at improving emotional and physical health, financial stability, employment, housing, and family support needs is an obvious practical implication of this investigation.

There are obvious policy implications that arise from this issue as well. On the level of corrections program policy, the present research provides a new perspective on prisoner preparation for release and post-release support programs by emphasising the need to recognise the person-in-context and designing and offering programs accordingly. Examination of the variables influencing reintegration within an ecological model suggests that attention be directed to the *whole person*, rather than conceiving prisoners (and ex-prisoners) merely in terms of skill deficiencies and character defects.

Attention to the emotional dimension

A second practical implication of this study is that it points out the importance of including attention to the emotional dimension of reintegration when preparing prisoners for release and supporting them in the community. While service professionals may recognise that community reintegration is often a time of turbulent emotions for ex-prisoners, the present investigation suggests that support services should focus more directly and actively on the emotional needs of ex-prisoners at this time.

It is apparent that there is a real need for programs that are directed toward alleviating potential distress associated with reintegration, with intervention tailored to address longer-term emotional needs. Providers of transition programs need to be cognizant, therefore, of the fact that a relatively high proportion of ex-prisoners experience levels of depression, anxiety, and/or anger beyond the normal range, and that it is not sufficient to simply provide practical support in the form of housing, employment, rehabilitation for dependency problems, and financial assistance, among others, as is

typically the case. The present study shows is that there is a whole emotional dimension that needs to be addressed in support programs both over the short- and longer-term, in addition to the many different practical and material issues that ex-prisoners face. Moreover, appropriate treatment and support must be provided to affected individuals at their time of greatest need, whether that be in the prison environment, immediately following release, or in the months, or even years, following prison release. It is important for those involved in the management and treatment of prisoners to appreciate that impending release may be associated with elevated levels of depression, anxiety, and/or anger for a sizeable proportion of prisoners. One possible response to this apparently heightened emotionality may be to ensure that all prisoners (rather than only those who volunteer) receive pre-release support, including the provision of lists of available support services, and appointments and referrals to mental health workers in the community if individual cases warrant that.

The opportunity for prisoners to discuss their feelings about leaving the prison environment and re-entering the community in the context of pre-release planning may also reduce feelings of depression. Moreover, improved support structures and linkages between support services such as those between mental health professionals, case workers, and other support staff, may also facilitate re-adjustment to the community, potentially mitigating any feelings of distress that may arise from 'falling through the gaps' in service provision.

Attention to multiple disadvantage and complexity in conditions
A third practical implication of the present investigation is its empirical confirmation that ex-prisoners typically experience multiple disadvantage in community reintegration. As reported earlier, a large number of investigators have alluded to the wide range of barriers to reintegration that may be experienced by ex-prisoners, including those that relate to housing, finance, employment, health, family reunification, and emotional problems, as examples (e.g., Graffam & Shinkfield, 2006; Hirsch et al., 2002; NACRO, 1997; Webster et al., 2001). Several investigators have also reported co-morbid conditions of psychological ill-heath and substance use among prisoners (e.g., Chiles et al., 1990; Edens et al., 1997), indicative of multiple disadvantage.

As remarked earlier, pre-release planning programs may benefit prisoners with emotional health problems by incorporating efforts to ameliorate symptoms of these disorders in order to promote successful reintegration. Of course, a relatively high proportion of prisoners have co-occurring mental health and substance use disorders (Edens et al., 1997) that they may take with them when they leave prison, further complicating matters. In fact, more than 30 percent of prisoners in the present investigation self-reported co-occurring mental health (most frequently bi-polar disorder and depression) and substance use disorders, and a fair proportion of these individuals had these disorders together with levels of depression, anxiety, and/or anger that were beyond the normal range. This finding indicates the comprehensiveness of support needs of this group, calling for distinct and focused treatment and support following release. Numerous adaptations to pre-release and post-release treatment programs are suggested to better address the multiple and complex needs of this group, and may include modifications to program content, delivery, intensity, and treatment duration (Edens et al., 1997).

Cost of recidivism versus reintegration

Additionally, results of the present investigation have implications for our understanding of the cost of reintegration support versus the cost of recidivism. Although this investigation did not address the financial costs of support, it has confirmed that a relatively large number of ex-prisoners require protracted and wide-ranging support including psychological support, general medical support, material assistance, employment assistance, accommodation assistance, and support and treatment for dependency issues. There is a real need, therefore, for the provision of support to extend beyond what is typically provided in the form of emergency assistance and a letter of introduction to a social security officer. It is acknowledged that the health-care system costs of chronic drug and alcohol dependency alone are extremely high, as are the social costs of drug abuse (Collins & Lapsley, 2002). When the multiple needs of ex-prisoners are taken into account, it is clear that the cost of support to make reintegration successful is even higher.

The reported cost of imprisoning a person in Australia ranges up to approximately $AU76,000 per annum (Auditor General Victoria, 2003), and about 60 percent of the people who are in prison right now have been there at least once before (ABS, 2005a).

The real cost of recidivism is actually much higher than this figure because the cost of incarceration excludes the cost of judges, bailiffs, and other court-related expenses. In other words, the cost of administering criminal justice and incarceration, like the cost of support, is very high. Thus, recidivism has a high cost attached to it – much higher than the cost of keeping individuals in prison. The social costs to individuals, families, victims, and communities are incalculable, but are understood to be, in their own way, extremely high. Putting a price-tag on support would be useful in the future, and should be addressed as a matter of some urgency by researchers in the correctional services field. The present investigation has, at the very least, demonstrated through the wide-ranging conditions of need that the cost of support, although high, is a worthwhile cost and one that has real benefits attached to it. Put simply, the cost of success in reintegration is not cheap, but is lower than the cost of failure.

Related to this issue, broad community-wide promotion of reintegration of ex-prisoners is an essential area for action. That promotion should include publicising the conditions of disadvantage that are associated with commencing criminal activity, the increased disadvantage associated with a criminal record and maintenance of a criminal lifestyle, and the social and economic costs to the community of not providing support for lifestyle change of ex-prisoners and of a growing corrections system. It is necessary to demonstrate to the community at large that ex-prisoners are capable of reintegration, and that reintegration saves money as well as improves the quality of life within our communities.

It is reasonable to consider recently released prisoners to be most vulnerable to re-offending, if only because we know that a large proportion of ex-prisoners who do re-offend do so in the first three months post-release, and that personal resources and community networks are least developed for those individuals at that time in the process of reintegration. Therefore, not only to ensure a quality program and the best possible support for individual ex-prisoners, but also to be more effective in reducing recidivism, it is important to focus on the critical period of transition and invest extra resources, if necessary, to ensure that transition from prison to community is successful. Moreover, given that there are numerous challenges for ex-prisoners going through the process of reintegration, and that these individuals have such comprehensive support needs generally, intervention programs clearly need to be

prepared to deal with numerous and wide-ranging issues that can impede success. In short, ex-prisoner support needs are often intensive and extensive, and costs of effective intervention are likely to be high, though not as high as the total social and economic costs of crime. It is essential that we learn from prior and existing national and international programs that are designed to both improve the prospects of ex-prisoners and support them in reintegration.

Conclusion

There has been little research interest in examining how the emotional state of prisoners may change following prison release and scant attention to the factors that are associated with and may contribute to depression, anxiety, and anger among ex-prisoners. The present study has attempted to fill this gap. Level of depression, in particular, appears to fluctuate over time, with prison release and time since release also important contributors. Emotional state of ex-prisoners appears to play an important role in community reintegration, with several indicators of reintegration contributing significantly to depression, anxiety, and anger over the short (1-4 weeks post-release) and longer-term (3-4 months post-release). Adopting an ecological model of reintegration allows system-wide effects to be analysed separately and in combination in order to gain a more complete perspective about the type and level of challenges that ex-prisoners face in community reintegration. Each individual has a unique pathway that leads to success or failure in reintegration with these variables impacting in different ways for each person. Understanding how these variables interact and change over time appears to be the way forward, and is of relevance for researchers, prison staff, service professionals, criminal justice providers, and ex-prisoners themselves.

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