LONG-TERM HOMELESSNESS:

UNDERSTANDING THE CHALLENGE

12 months outcomes from the Journey to Social Inclusion pilot program

GUY JOHNSON, SHARON PARKINSON, YI-PING TSENG AND DANIEL KUEHNLE







THANKS TO

The researchers would like to express their deep appreciation to Nicola Wylie. Without her this report would not be possible. We would also like to thank Sandra Sesa for her assistance with the surveys and all the people who have participated in the study for sharing their experiences and time.

QUALITY ASSURANCE

An Evaluation Reference Group has been established to oversee the evaluation of J2SI. This group have reviewed this report and provided comment. Members of this group include Professor Terry Burke (Swinburne University); Michael Perusco (CEO, Sacred Heart Mission); Sue Grigg (Manager, J2SI); Nicola Wylie (Project Officer, J2SI); Dr Hellene Gronda (Director Research Synthesis, AHURI); Quynh-Tram Trinh (Manager, Research & Evaluation, Department of Human Services). Additional input from John Daley (CEO Grattan Institute) and David Green (LaTrobe University).

ABOUT THE AUTHORS

Dr Guy Johnson is a Senior Research Fellow at the Australian Housing and Urban Research Institute, RMIT University.

Dr Yi-Ping Tseng is a Senior Research Fellow at The Melbourne Institute for Applied Economic and Social Research, The University of Melbourne.

Dr Sharon Parkinson is a Research Fellow at the Australian Housing and Urban Research Institute, RMIT University.

Daniel Kuehnle is a Research Officer at The Melbourne Institute for Applied Economic and Social Research, The University of Melbourne.

ABOUT SACRED HEART MISSION

Sacred Heart Mission has almost 30 years experience delivering services to people who are chronically disadvantaged and it assists hundreds of people every day who are homeless or living in poverty.

For further information about Sacred Heart Mission go to www.sacredheartmission.org.

SUGGESTED CITATION

Johnson, G., Parkinson., S. Tseng, Y., & Kuehnle, D. (2011) Long-term homelessness: Understanding the challenge -12 months outcomes from the Journey to Social Inclusion pilot program. Sacred Heart Mission, St Kilda.

SACRED HEART MISSION WOULD LIKE TO THANK THE FOLLOWING FOR THEIR FINANCIAL SUPPORT OF J2SI:

Lord Mayor's Charitable Foundation The Peter and Lyndy White Foundation RE Ross Trust

William Buckland Foundation managed by ANZ Trustees
Victorian Government
St Mary's Parish East St Kilda

Andylnc Foundation
Limb Family Foundation
Carbini Health

Orcadia Foundation

SERVICE PARTNERS

RMIT University and the Australian Housing & Urban Research Institute
Alfred Health Psychiatric Services
Department of Human Services
Windana Drug and Alcohol Recovery
Melbourne Institute of Applied Economic & Social Research
Mental Illness Fellowship



EXECUTIVE SUMMARY

Journey to Social Inclusion (J2SI) is a pilot program designed to break the cycle of long-term homelessness. The program provides intensive support for up to three years to assist long-term homeless people receive the range of services they need. The J2SI model contrasts with existing services that tend to be short-term responses which do not address the underlying issues causing long-term homelessness.

This is the first of four reports evaluating the J2SI program. It documents preliminary outcomes from the first 12 months of a randomised controlled trial evaluating J2SI's effectiveness. The evaluation tracks the outcomes of J2SI participants over time. The randomised control trial approach then compares their outcomes with those of a comparison group who are being supported by existing services.

The report reveals the extent of the problems faced by those who are amongst the most disadvantaged in our society. People who are long-term homeless almost always have traumatic childhoods (87%). Virtually all grew up in poverty, and experienced major and often repeated childhood trauma such as sexual or physical abuse, the involvement of child protection, or an experience of homelessness at a young age. Over 90% now have chronic ill health and drug and alcohol problems and over three quarters have been physically assaulted at some point in their lives. None have paid employment and most have not worked for five years or more. Traditional service responses may assist some who are long-term homeless to find stable housing, but most do not.

Even at this early stage, there are signs that the J2SI program is assisting participants to overcome their disadvantages. Relative to the comparison group, many more now have permanent housing (75% vs. 30%) and they are using expensive acute physical, mental health and homelessness services less often. A few have started paid employment.

This report makes plain the extent of the challenges facing people who are long-term homeless. Over the next three years we will track whether the approach adopted by J2SI provides a permanent solution to long-term homelessness. Future evaluation reports will assess program outcomes after 2, 3 and 4 years, and whether the benefits justify the costs.

EXECUTIVE SUIVINARY	
1. INTRODUCTION	2
1.1 The long-term homeless as a distinct group	2
1.2 The J2SI program and evaluation	3
1.3 Structure of this report	3
1.4 A short history of homelessness in Australia	4
1.5 Defining long-term homelessness	4
1.6 The cost of long-term homelessness	4
2. ABOUT THE JOURNEY TO SOCIAL INCLUSION PILOT	5
2.1 Existing services for the homeless	5
2.2 The J2SI service model	5
2.3 J2SI and evidence-based policy	5
3. THE EVALUATION APPROACH - RANDOMISED CONTROLLED TRIAL	6
3.1 Control group approach	6
3.2 Selecting randomised control trial participants	6
3.3 Tracking trial participants over time	7
3.4 Data for the first report	7
4. PATHWAYS TO LONG-TERM HOMELESSNESS	8
4.1 The link between trauma and long-term homelessness	8
4.2 Childhood trauma among J2SI study participants	9
5. DEMOGRAPHIC AND SOCIAL CHARACTERISTICS	1,
5.1 Demographics	1,
5.2 Housing	1,
5.3 Health	1,
5.4 Problematic substance use	1,
5.5 Trauma	1,
5.6 Incarceration	1,
5.7 Education, unemployment and poverty	1,
5.8 Conclusions and challenges	1
6. ONE YEAR INTO THE PILOT	,
6.1 Engagement	,
6.2 Housing outcomes	
6.3 Health outcomes	
6.4 Health service usage	2
6.5 Problematic drug use	2
6.6 Other service usage	2
6.7 Social acceptance and support	2
6.8 Economic participation	2
6.0 Economic pamapanon	_
7. THE NEXT STEP	2
REFERENCES	2
APPENDIX A Retention	3
APPENDIX B Social and demographic profile	3
APPENDIX C Outcome data	3

1. INTRODUCTION

'COMPLEX PROBLEMS HAVE SIMPLE, EASY TO UNDERSTAND, WRONG ANSWERS' (Henry Louis Mencken, 1880-1956)

1.1 THE LONG-TERM HOMELESS AS A DISTINCT GROUP

The central premise of the J2SI program is that people who are homeless for a long time need different kinds of assistance to those who have been homeless for a shorter period of time. Research shows that the homeless population is made up of various subgroups that have different biographical experiences, characteristics and needs. Recognising meaningful subgroups within the homeless population helps target interventions to match people's housing and support needs with the appropriate resources. Historically, Australian policy has targeted interventions on the basis of demographics such as age, gender and household type. More recently, it has been suggested that how long people have been homeless is a good indicator of the type, intensity and duration of services they need (van Doorn 2005).

Among the homeless population three general subgroups can be identified. The largest group consists of people whose primary issues are a lack of affordable housing and/or work opportunities. They typically need relatively little support and most of these people return to housing quickly and get on with their lives.

Another group, sometimes referred to as the 'transitional' homeless, become homeless for more diverse reasons, remain homeless for longer and have greater support needs than the first group. While they generally return to housing, it often takes a couple of attempts.

The third group are people who remain homeless for long periods of time, often cycling between the street, institutions and poor quality temporary accommodation. People in this group are mostly single and their physical and mental health is extremely poor. Although this group is relatively small, if overseas research is anything to go by, they consume a disproportionate amount of health, justice and welfare resources (Culhane and Metraux 2008; Pleace 2008).

This evaluation is focused on the third group, described in this report as 'long-term homeless' and sometimes referred to as 'the chronically homeless'. The long-term homeless have posed an enduring challenge for policy makers and practitioners alike. In Australia, responses to homelessness are typically based on high case loads and short-term assistance. While this can help the short-term homeless to regain their housing, it struggles to meet the more complex needs of the long-term homeless.

Recent policy interest focusing on new ways to break the cycle of chronic homelessness can be traced, in part, back to the Federal government's White paper on homelessness (FaHCSIA 2008). The White paper provides the policy framework to reduce homelessness by half by 2020. The White paper and the subsequent National Partnership Agreement on Homelessness (NAHA) commits every State and Territory to specific targets to reduce the number of people sleeping rough as part of a broader strategy of breaking the cycle of long-term homelessness.

1.2 THE J2SI PROGRAM AND EVALUATION

Less than 12 months after the White paper was released Sacred Heart Mission launched the Journey to Social Inclusion (J2SI) pilot project. J2SI is designed to assist people who are long-term homeless make a permanent transition out of homelessness. J2SI is very different from existing homelessness models. J2SI workers have a case load of 1:4 and can support clients for up to three years. J2SI sought rapid re-housing for their participants as well as providing integrated therapeutic and mental health responses and opportunities for training and skills development.

As part of its commitment to improving the evidence about homelessness and drive service improvements, Sacred Heart Mission commissioned a full social and economic evaluation of J2SI. Sacred Heart Mission contracted the Australian Housing and Urban Research Institute at RMIT University and the Melbourne Institute of Applied Economic and Social Research at The University of Melbourne to undertake the evaluation.

The evaluation involves implementing the J2SI pilot program as a randomised control trial where participants are randomly assigned into two groups: those receiving J2SI services and those receiving existing services. A longitudinal survey will be conducted to examine how the two groups of study participants are travelling at eight points-in-time over a four year period. While such an approach can provide robust insight into the short, intermediate, and long-term impacts of J2SI, tracking two cohorts of long-term homeless people over a four year period is not an easy task and requires significant resources and commitment. Nonetheless, in the context of the shift towards evidence-based policies here and overseas, the benefits of using this 'gold standard' approach to evaluation outweigh the costs.

1.3 STRUCTURE OF THIS REPORT

This is the first in a series of four reports that aim to understand whether the J2SI program works. There are six chapters in this report. The remaining part of this chapter provides some background material on long-term homelessness. Chapter 2 summarises the J2SI service model. Chapter 3 describes the approach we use to evaluate J2SI.

The fourth chapter documents the background of the study participants and concludes that most experienced childhood trauma and poverty which we argue shapes their pathways into and experiences of homelessness. We then examine people's experiences of homelessness and note that traumatic events are common place in the lives of the participants.

Chapter 5 profiles the demographic and social characteristics of the study participants when they started with the program. The data confirm that the long-term homeless have limited economic resources, are in poor physical and mental health and frequently misuse drugs and alcohol. Chapter 6 presents shifts in the participants' lives over the first 12 months. At this early point in the trial it is premature to draw firm conclusions from the outcome data. Nonetheless, after 12 months many more of the J2SI participants are in suitable housing and they have significantly reduced their use of welfare and health services compared with the control group.

Chapter 7 reflects on the short-term outcomes in the context of the initial program goals focusing on engagement, practical assistance and stabilisation. It concludes by mapping out the direction of the research study for the remaining 36 months.

1.4 A SHORT HISTORY OF HOMELESSNESS IN AUSTRALIA

Up until the 1970s homelessness in Australia was confined to a small, relatively homogenous population of single people, mainly men, who had weak family ties, were unemployed, often had drinking problems, and lived in inner city areas commonly known as 'skid row'. By the late 1970s fundamental changes within industry, demography and political thought re-shaped Australia's social and economic landscape.

Economic restructuring throughout the 1980s and 1990s reduced the number of jobs requiring manual labour, family dissolution increased substantially, policies of deinstutionalisation were adopted, and the gentrification of inner city areas contributed to a steady decline in the availability of low cost housing. During this period of social and economic change the size and composition of the homeless population changed in Australia as young people, women and families became increasingly visible amongst the homeless (Neil and Fopp 1993).

The length of time people were homeless also became more varied. In the past the homeless population was relatively stable, but now some people started to move in and out of homelessness relatively quickly, while others remained homeless for long periods (Neil and Fopp 1993; Piliavin, Sosin, Westerfelt and Matsueda 1993; Phelan and Link 1999).

1.5 DEFINING LONG-TERM HOMELESSNESS

International studies consistently suggest somewhere between 10-25% of the homeless population are long-term homeless. However, there has been a long debate in Australia about what constitutes long-term homelessness, with little agreement. Without an agreed definition it is difficult to quantify exactly how many people experiencing homelessness in Australia have a long-term problem. J2SI defined long-term homelessness as people who have either slept rough continuously for 12 months or more or people who have been homeless episodically for at least three years.

1.6 THE COST OF LONG-TERM HOMELESSNESS

Even though the long-term homeless are a relatively small group, recent studies from the US indicate that they cost health care, justice and social services a great deal. For example, the Boston Health Care for the Homeless program tracked 119 'chronically' homeless people over a five year period. During that time 33 people died yet the group still had 18,834 emergency room visits at an average cost of \$1,000 per visit, implying an annual cost to the health system of around \$40,000 per person (Boston Health Care for the Homeless Program).

In a 2008 study of administrative records of homeless shelter use in New York and Philadelphia, Culhane and Metraux (2008) found that the 'chronically' homeless represented just under 10% of all adult shelter users. However, they filled half the beds on any given night and accounted for half the system's expenditure. With a median cost per shelter bed per year in the U.S amounting to around \$9,300, Culhane and Metraux argued that large sums of money were being spent just to keep people in a state of homelessness – although the amounts are in fact small relative to the cost of medical services.

Long-term housing may be able to reduce these costs. In Portland, researchers examined how 99 'chronically' homeless individuals used social services. They found that when they moved into supported housing, social service costs reduced by 50 per cent. The largest declines were in health costs, with inpatient hospitalisation savings (72%), followed by emergency room savings (62%) and mental health care savings (41%). There were also smaller savings in jail nights and police contacts.

These findings point to the potential cost savings that might be achieved by investing in programs that aim to and are adequately resourced to permanently resolve long-term homelessness. However, the findings of these and other US 'cost effectiveness' studies should be interpreted cautiously for two reasons. First, many studies do not involve 'random assignment and seldom include comparison or control groups ... (and are) thus likely to over-estimate cost reductions' (Tsemberis 2010:51). Second, cost offsets achieved in one jurisdiction may not be so easily achieved in another country where the prevailing social, economic and cultural conditions differ.

2. ABOUT THE JOURNEY TO SOCIAL INCLUSION PILOT

'THERE IS NOT NEARLY SO MUCH CRAZINESS AMONG HOMELESS PERSONS AS THERE IS IN THE SYSTEMS DESIGNED TO HELP THEM' (Liebow 1993:3)

2.1 EXISTING SERVICES FOR THE HOMELESS

Australia's major homelessness programs have not resolved the problems of many long-term homeless people. From 1985 to the end of 2008 the Supported Accommodation Assistance Program (SAAP) was Australia's flagship homelessness program. Since 2009 services for homeless people have been provided under the National Affordable Housing Agreement (NAHA). There are few fundamental differences in the operational aspects of NAHA and SAAPa. In both systems, service responses are structured around relatively short crisis or transitional interventions. These do not resolve the problems of the long-term homeless. We know this because most of the long-term homeless have been supported and accommodated by existing specialist homelessness services, often on numerous occasions, but their problems generally remain unresolved (Johnson, Gronda and Coutts 2008; Johnson and Chamberlain 2008b). This challenges the prevailing wisdom that what is needed is more services. Instead, it suggests that a different kind of service ought to be offered to the long-term homeless.

2.2 THE J2SI SERVICE MODEL

The J2SI model was borne out of the recognition by Sacred Heart Mission that existing approaches were usually failing the long-term homeless. The J2SI service model differs significantly from existing approaches in five important ways:

1. J2SI provides long-term support. The median length of support provided by SAAP agencies in 2007/2008 was 10 days (Australian Institute of Health and Welfare 2009:39). J2SI supports each client for up to three years.

- 2. J2SI provides intensive support. The client case load is 1:4 for the three year period. Existing funded case loads in NAHA services are around 1:48 over a 12 month period.
- 3. J2SI focuses on the rapid housing of participants in safe, secure, affordable, long-term housing.
- 4. J2SI responds to the specific mental health and psychological needs of participants, with a specific focus on the impact that trauma has played in people's lives.
- 5. J2SI includes integrated training and skills development that aims to enhance self-esteem and provide participants with interpersonal, practical, tenancy and vocational skills.

The J2SI pilot commenced in November 2009 with the aim of assisting 40 long-term homeless people to make a permanent exit from homelessness. To achieve this aim, J2SI practices are explicitly designed to focus on services that improve:

- residential stability;
- physical and mental health outcomes; and
- social and economic participation.

2.3 J2SI AND EVIDENCE-BASED POLICY

J2SI also aims to improve our knowledge of long-term homelessness in Australia and the effect of long-term, intensive, integrated interventions. Although there is some good evidence about the characteristics and circumstances of the long-term homeless, there is little research that tracks the lives of the long-term homeless over several years. Nor is there much local research rigorously evaluating the effectiveness of interventions specifically designed to resolve long-term homelessness. The J2SI pilot aims to provide robust evidence to inform policy and program development.

^a Throughout the report we refer to SAAP. This is because we draw on SAAP data for comparisons. Data on specialist homeless services funded through the NAHA has yet to be released.

3. THE EVALUATION APPROACH – RANDOMISED CONTROLLED TRIAL

The evaluation has been designed to determine how the J2SI program affects the participants' housing stability, mental and physical well being, and social and economic participation over time. The outcomes of J2SI participants are compared with people in a control group that met the same admission criteria but who did not participate in the J2SI program.

3.1 CONTROL GROUP APPROACH

Evaluating how participants' lives change over time does not indicate whether changes are a result of the J2SI intervention, changes that would have occurred anyway, or a combination of both. The most rigorous way of testing how the J2SI program changes lives is to compare participants in the program with those in a control group whose characteristics were similar to J2SI participants when they were referred. With a control group stronger causal inferences about the impact of J2SI can be made.

There are many ways of selecting a comparison group but most methods assume that all of the factors that influence individual's circumstances are known to the researchers. This is rarely the case. To address this issue a randomised controlled trial was used. People willing to participate in the program were identified, and then randomly assigned into treatment and control groups. The characteristics of individuals are independent of whether they are in the treatment group.

The outcomes of the control group can be used to proxy the counterfactual outcomes of the treatment group. It is then reasonable to infer that differences in the outcomes of the two groups are a result of the J2SI program.

3.2 SELECTING RANDOMISED CONTROL TRIAL PARTICIPANTS

Most potential participants were referred by Sacred Heart Mission with a small number from other homelessness agencies in inner city Melbourne.

Of the 99 people initially referred, 88 people satisfied the admission criteria which was people who:

- had slept rough continuously for more than
 12 months; and/or
- had been in and out of homelessness for at least three years (including people who have been housed in the last six months and are at risk of further homelessness); and
- were aged between 25 and 50 (within 12 months of their 25th birthday or 50th birthday at commencement of the program).

The 88 individuals were informed about the evaluation and gave informed consent to participate^b. They were then randomly assigned into two groups: 40 people were assigned to Group J which receives J2SI services (the treatment group); and the remaining 48 were assigned to Group E (the control group) which receives existing services. T-tests and Pearson's chi-squared tests were used to test the independence of Group J and E at assignment on variables drawn from the referral data. We found no statistically significant differences between the Groups J and E.

Although the referral process was generally effective some referrals did not commence J2SI, some dropped out of the program early (n=5) and some temporarily exited the program (n=3). This required the recruitment of 16 additional people and the subsequent random allocation of eight people to Group J. We outline this process more fully in Appendix A.

b Ethics approval was sought and granted from RMIT University - Register number HRESC B-2000197-07/09.

3.3 TRACKING TRIAL PARTICIPANTS OVER TIME

Quantitative data at eight points-in-time over a four year period will be collected to measure individual changes and analyse the cost-effectiveness of the program. Quantitative data is collected on entry into J2SI (BL); at six months (6mFU°); at 12 months (12mFU); at 18 months (18mFU); at 24 months (24mFU); at 30 months (30mFU); at 36 months (36mFU) and at 48 months (48mFU). The survey collects information about education, employment, and income as well as social inclusion, mental and physical health and housing.

The evaluation is also undertaking four in-depth qualitative interviews with 40 participants to supplement the quantitative analysis. The four rounds of semistructured interviews are scheduled to coincide with the baseline survey and the survey in waves four, seven and eight. This report draws on the first in-depth interview. Where we use qualitative information people's names and various personal details have been changed to ensure confidentiality.

3.4 DATA FOR THE FIRST REPORT

This report analyses data from the baseline interview/ survey to describe the demographic, social and health characteristics of the study participants, including their homelessness histories. The report then draws on baseline and outcome data collected during the first 12 months to establish and compare any changes in the housing, well being, and social and economic participation of individuals in the J2SI program and the control group.

The baseline surveys started in November 2009, with the six month follow up survey commencing in May 2010, and 12 month follow up data collected from November 2010. In this report, we only report outcomes for participants who entered the trial prior to March 2010. Those who entered after this date have been excluded from this report because they have yet to complete the 12 month follow-up survey.

In total, of 96 people recruited to the trial 83 individuals responded to our surveys. The initial response rate (86.5%) is very high for a study of this kind (see for instance Thomson Goodall and Associates 2001; RPR Consulting 2003; Johnson 2006; Grace, Keys, Hart and Keys 2011).

Due to the difficulty of engaging with the long-term homeless, some participants were not interviewed until several months after trial commencement. To avoid biasing the baseline, the initial surveys for some individuals were then re-classified as follow-up surveys according to their interview dates. Table 1 below presents the numbers of responses by group according to our re-classification. The rules of re-classification are discussed in Appendix A.

TABLE	1: RETENTION	N RATES		
	Survey Participants	Base Line	6mFU	12mFU
Group E	43	n=42 (97.6%)	n=35 (81.4%)	n=33 (76.7%)
Group J	40	n=32 (80.0%)	n=37 (92.5%)	n=36 (90.0%)
TOTAL	83	n=74 (89.2%)	n=72 (86.7%)	n=69 (83.1%)

With any study tracking people over time, losing contact with people along the way (or sample attrition) is a recognised risk. Among a mobile and disenfranchised population such as the long-term homeless the risk of attrition is even higher (deVaus 1995; Hough, Tarke, Renker, Shields and Glatstein 1996; Dworsky and Piliavin 2000). In Australia, longitudinal studies involving the long-term homeless report retention rates as low as 40% after 12 months^d. Low retention rates can systematically distort the findings as the people who are lost to attrition tend to be different from those who remain involved (Sullivan, Rumptz, Campbell, Eby and Davidson II 1996; Wong and Piliavin 1997). This is an important factor to take into account when assessing the findings from this or indeed any longitudinal study. The 12-month retention rate of 83% (Table 1) is high compared to other longitudinal studies of the long-term homeless (Sosin, Piliavan and Westerfelt 1990; RPR Consulting 2003; Mission Australia and Murdoch University 2011).

4. PATHWAYS TO LONG-TERM HOMELESSNESS

There are many ways of thinking about long-term homelessness but one issue that repeatedly emerges is why some people become entrenched in homelessness when others in similar circumstances do not. This is an important issue because it is often presumed that certain characteristics that are disproportionately high among the long-term homeless, for example mental illness and/or substance abuse, are the causes of their homelessness. However, these issues are often consequences of prolonged exposure to homelessness (Johnson and Chamberlain 2008a; Johnson and Chamberlain 2011). Research shows that in order to understand long-term homelessness it is important to consider the way people's biographical characteristics mediate their interactions with other people, institutions and their experiences of homelessness over time. One biographical characteristic that appears to have a profound impact on the way people experience homelessness is trauma.

4.1 THE LINK BETWEEN TRAUMA AND LONG-TERM HOMELESSNESS

Local and international studies consistently show that the long-term homeless have very different experiences from those whose experience of homelessness is relatively short (Calsyn and Morse 1991). The long-term homeless often come from families that disintegrated and that lived in poverty. People who experience childhood trauma such as sexual or physical abuse, neglect, or institutionalisation (such as the Child Protection or prison systems) are also much more likely to become long-term homeless. In addition, the long-term homeless usually had their first experience of homelessness at a young age. Consequently, they often grow up with little education, and have poor employment records.

More often than not people who become long-term homeless have experienced some form of childhood trauma (Calsyn and Morse 1991; Buhrich, Hodder and Teesson 2000; Zugazaga 2004). Trauma is generally understood as physically and/or emotionally painful experiences that overwhelm people's capacity to cope. Common forms of trauma include violent assault, incest, domestic violence, sexual and emotional abuse, rape, and kidnapping. Trauma can be both random (as is often the case with violent assault) or it can be repeated (as is often the case with child abuse or other adverse childhood experiences).

Obviously, some people who experience childhood trauma do not become long-term homeless. Other factors need to be identified that lead to childhood trauma developing into long-term homelessness and here it appears that the intersection with economic disadvantage is a particularly important relationship to understand.

Nonetheless, despite policy interest in reducing longterm homelessness, trauma is conspicuous by its absence from the policy literature. The White paper only fleetingly refers to trauma despite studies indicating that the lives of the long-term homeless are marked by extreme and often repeated experiences of trauma (Buhrich et al. 2000). The high incidence of trauma is often linked to the high risk 'lifestyle' that people experiencing long-term homelessness are exposed to, but there is a very strong empirical link between childhood trauma and a person's vulnerability to long-term homelessness as an adult. In short, long-term homelessness often has it roots in adverse childhood experiences. Thus, it seems reasonable to conclude that providing a trauma informed service response characterised by long-term and intensive support is crucial to intervening effectively to improve the lives of the long-term homeless.

4.2 CHILDHOOD TRAUMA AMONG J2SI STUDY PARTICIPANTS

The J2SI evaluation confirms that childhood trauma is an important contributing cause of long-term homelessness. Almost all of the evaluation participants (87%) had experienced childhood trauma in one form or another, and the average age which they first experienced a traumatic event was just under 13 years of age (Table 2). Many of the participants grew up in circumstances suggestive of chronic family strain that were often embedded in poverty and disadvantage.

A key indicator of the extent of adverse childhood experiences is the proportion who grew up in the out-of-home care system. Over one third of the participants (40%) reported they had spent time in the Child Protection system when they were growing up (Table 2). Other studies show that young people who end up in the Child Protection system grow up in homes where parental substance abuse and family violence are common (Barber and Delfabbro 2004; Stein 2006). Although we did not collect quantitative data on the reasons participants went into Child Protection the qualitative interviews suggest that parental substance abuse was an issue for many participants. One participant commented that she:

... grew up in a dysfunctional home. Mum was an alcoholic and addicted to prescription drugs. And she'd get drunk, more often than not lose her money on the poker machines, be in a foul mood, take it out on me, and just kick me out of the house (1025°, single, female, 45, Group J).

There is also empirical evidence to show that young people who are neglected often grow up in environments where violence and substance abuse are common

(Delfabbro and Barber 2003; Barber and Delfabbro 2004). One participant's mum was an alcoholic and the following quote reveals the extent to which neglect affected her day to day life:

Well obviously there was no meal on the table. I had to steal from the shops, or eat out of garbage cans, that sort of thing ... they went to the pub and club a lot and because we would eat while they were out they ended up locking us out of the house and we had a dog, and his dog biscuits were in the laundry and I remember I used to either eat them or petals off the geranium plants, or I'd steal milk or bread off people's front doorsteps cause back then when I was seven they used to get it delivered, or I'd steal the change off the milk money and bread money. Whatever it took to survive (1025, single, female, 45, Group J).

Young people also end up in the Child Protection system when their parents struggle with severe mental health problems. As one participant explained:

Yeah my mum suffers from bi-polar and she was kind of at the stage where she couldn't live without having a man and she'd had quite a few different boyfriends and because they were trying to discipline me and things like that, I left. I left home and at the start I went into foster care and I didn't like the foster care through the Department of Human Services so I ended up leaving and coming onto the streets (1090, couple, female, 34, Group E).

Young people who are placed in the Child Protection system are caught in a double bind – in addition to trauma they have experienced at home, being separated from

TABLE 2: CHILDHOOD EXPERIENCE OF TRAUMA						
	ALL		MEN		WOMEN	
	N	%	N	%	N	%
HAVE HISTORY OF ADVERSE CHILDHOOD EXPERIENCES ^a	83	86.7	40	87.5	43	86.0
AGE FIRST EXPERIENCED TRAUMATIC EVENT	57	12.7yrs	27	14.8yrs	30	10.9yrs
EVER PLACED IN OUT OF HOME CARE	81	39.5	40	27.5	41	51.2
FIRST EXPERIENCE OF HOMELESSNESS AT 18 OR YOUNGER	81	53.1	40	52.5	41	53.7

^aBased on three indicators: ever placed in Child Protection; homeless 18 or under; reported experience of childhood trauma.

^{*} Note: This table also uses questions that have been asked retrospectively in the 6 months follow-up survey.

[•] For the purpose of the analysis and also confidentiality, each case was assigned a unique identifier.

their biological family and placed in Child Protection is an equally traumatic event. Worse still, while being placed in Child Protection may provide short-term safety, longer term harm may result when placements are unstable, which is common in Child Protection systems across Australia (Delfabbro, Barber and Cooper 2000; Johnson, Natalier, Thoresen, Liddiard, Mendes, Bailey and Hollows 2010).

Many participants had experienced other forms of childhood trauma. We found a distressingly high rate of sexual abuse with over half (52%) of the participants reporting that they have ever been sexually molested. Both men and women reported sexual abuse, although the rate was higher among women (66% vs. 36%). Sexual abuse subsequently affects people's relationships with others. Studies have also established a link between sexual abuse and mental illness, noting that not only may sexual abuse be 'an important early stressor predisposing adult onset depression' but that 'the greater the abuse the greater the risk' (Buhrich et al. 2000).

Family instability and childhood trauma had a clear analogue in the participants housing experiences which, starting from an early age, were marked by patterns of extreme instability and homelessness. When young people experience extreme conflict, violence or abuse at home, they often leave. As one participant told us, living on the streets was safer than 'home':

I guess because home was so dysfunctional and I lived in fear, I felt safer on the streets. So I don't know. It's hard to explain. I just felt safer and I guess in a lot of ways it's still like that for me today. Because my abuse happened behind four walls, I still feel safer walking the streets at night than being behind four walls. And I know for a lot of people that would be hard to understand (1025, single, female, 45, Group J).

Being homeless at a young age is a traumatic experience in its own right. Just over half of the participants were homeless during childhood (defined as 18 or younger, Table 2), and one in ten were homeless at 12 years of age or younger (Table B1, Appendix B).

Children from families marked by violence, abuse and poverty are often profoundly disadvantaged growing up, and this disadvantage often becomes entrenched. Early childhood deprivation and economic disadvantage increases the risk of protracted homelessness in many ways. Exposure to traumatic events often makes it hard for a person to form and maintain relationships. Childhood trauma makes substance abuse more likely and may also be an important factor that predisposes some people to mental health problems as adults (Clark 2001; Read and Ross 2003). Childhood trauma can disrupt the development of skills and supports that help young people make a smooth transition to independent living. If a person with such a disadvantaged background does become homeless, their inability to break the cycle of homelessness is exacerbated by limited social and economic resources. As discussed in Chapter 5, when people are homeless for long periods it often leads to deteriorating mental and physical health, and this can further reduce their capacity to form the social connections necessary to overcoming homelessness.

If we want to understand more about long-term homelessness, the link to childhood trauma is crucial. Most of the participants struggled with complex, compounding and often quite extreme family problems from an early age and most became homeless in their childhood. This suggests that long-term homelessness is anything but a random occurrence. While there will always be some variation in the reasons why people experience long-term homelessness, the pathway into long-term homelessness is often established early. The way young people make sense of the materially depleted and traumatic conditions that characterise their lives, often establishes patterns of behaviour that shape their interactions with others for years.

5. DEMOGRAPHIC AND SOCIAL CHARACTERISTICS

In the previous chapter we showed that the personal trajectories of those sampled for the study are marked by high degrees of instability, disadvantage, deprivation and pervasive experiences of trauma. In this chapter we show the extent of disadvantage they face today including poor health, drug and substance abuse, trauma such as physical or sexual assault, poor education, incarceration, unemployment and poverty. This chapter draws on the surveys completed by 83 people before the end of March 2010.

5.1 DEMOGRAPHICS

The evaluation participants were almost evenly split between men (n=40) and women (n=43). Most are single (Table B2, Appendix B). The average age of 36.4 years is slightly older than that of the general homeless population (32 years) accessing SAAP support services during the corresponding period (Australian Institute of Health and Welfare 2009). Just under a half of the participants (48%) are aged between 31-40 years of age, a further third (30%) over 41 years, while the remainder (22%) are 30 years of age or younger.

5.2 HOUSING

Almost all (94%) participants fell within the definition of primary, secondary or tertiary homelessness at referral – which is not surprising given this was the primary criterion for admission to the program^f. As illustrated in Table 3 almost half (46%) were in rooming or boarding houses where they shared cooking and bathroom facilities. Almost one fifth (18%) had been sleeping rough or squatting, while a further 24% were in some form of emergency accommodation immediately before the study began. The remaining 2% (a partnered couple)

were housed but at high risk of homelessness given their long histories of homelessness and that their current accommodation was a sub-standard private rental dwelling with a short-term lease. As discussed below, the lack of stable, affordable, appropriate housing is a significant cause of other disadvantages such as poor health, trauma, and unemployment.

TABLE 3: ACCOMMODATION AT REFERRAL	TABLE 3:	ACCC	DMMODAT	ION AT	REFERRAL
------------------------------------	----------	------	---------	--------	----------

	AT RECRUITMENT %		
HOUSED		••••••••••	
Public/community housing	-	-	
Private rental	2	2.4	
HOMELESS			
Rooming/boarding house	38	45.8	
Friends/family	5	6	
Sleeping rough/squatting	15	18.1	
Emergency accommodation	20	24.1	
MARGINAL HOUSING			
Rehabilitation centre	1	1.2	
Other (eg prison)	2	2.4	
TOTAL	83	100	

For most of the participants, unstable housing seems to be entrenched. Any housing arrangements at the beginning of the study were probably temporary, given that the average participant moved five times in the six months prior to the first survey. Although we do not know the cumulative period each participant has been homeless, on average 16 years had passed between

Primary homelessness includes people without conventional accommodation (living on the streets, in deserted buildings, improvised dwellings, under bridges, in parks, etc. Secondary homelessness includes people moving between various forms of temporary shelter including friends and relatives, emergency accommodation, youth refuges, hostels and boarding houses. Tertiary homelessness includes people living in single rooms in private boarding houses without their own bathroom, kitchen or security of tenure, Chamberlain, C. and D. Mackenzie (1992). 'Understanding contemporary homelessness: Issues of definition and meaning', in Australian Journal of Social Issues 27(4): pp. 274-297).

their current homelessness, and their first experience of homelessness. The participants' housing histories indicate that long-term homelessness is often a constant drift between insecure accommodation arrangements, prisons, hospitals and the street. A significant majority (82%) had stayed in refuges, crisis and transitional accommodation at some point in their 'homeless career', and (89%) had lived in a boarding house. In general, accommodation such as boarding houses is not used by those with short-term or one off episodes of homelessness (Chamberlain, Johnson and Theobald 2007).

5.3 HEALTH

More than two decades of epidemiological, clinical and social studies of the long-term homeless have documented the increased incidence of health problems compared to the adequately housed.

Almost all of the study participants (93%) reported a chronic physical or mental health disorder (Table 4). Compounding these problems, almost all (89%) reported problematic drug and/or alcohol use (Table 4). These problems are consistent with the 'complex needs' literature that asserts that the long-term homeless have multiple disadvantages, requiring multiple supports and services. The physical health of the participants was extremely poor with 78% reporting a chronic physical health problem (see Table B3, Appendix B for more detailed information). The most common were diseases of the digestive system (42%), diseases of the respiratory system (39%), musculoskeletal diseases (39%) and physical

disabilities (29%). Physical health problems impaired the day to day life of many participants – 45% reported 'quite a bit' or an 'extreme' impact on their life as a result of physical pain.

It is likely that physical health problems are in part caused by homelessness. Living on the street is a harsh environment. Substandard living conditions provide limited facilities for good personal hygiene. Infectious diseases are often the result of limited washing facilities or a lack of clothes. When people are constantly on the move, they often do not get follow-up treatment. Homeless people often cannot afford food, or lack cooking facilities, and the resulting poor nutrition can significantly affect their health. The impact of homelessness on physical health was described by one participant:

I'm only 27 and I think it's made me age a lot quicker. Like my whole body hurts from sleeping rough and the cold and stuff like that. And the drugs and all that stuff to help you cope or deal with the nights ...like all those have impacted my body really hard (1098, single, female, late 20s, Group E)

Long-term homelessness also damages mental health, and this is a key issue for the overall situation of homeless people. Research shows that about one third of the homeless have a mental health problem, but the rate of mental illness is much higher among the long-term homeless (Snow, Baker, Anderson and Martin 1986; Johnson and Chamberlain 2011). Our data corroborate

	ALL		MEN		WOMEN	
	N	%	N	%	N	%
HAS A CHRONIC PHYSICAL AND/OR MENTAL HEALTH CONDITION	83	92.8	40	87.5	43	97.7
Physical health condition	83	78.3	40	75.0	43	81.4
Mental health disorder	83	60.2	40	55.0	43	65.1
PROBLEMATIC DRUG AND/OR ALCOHOL USE	83	89.2	40	87.5	43	90.7
Problematic drug use	83	81.9	40	75.0	43	88.4
Problematic alcohol use	83	48.2	40	57.5	43	39.5
Both drug and alcohol issue	83	38.6	40	42.5	43	34.9

Source: Information extracted from the first survey participants responded to.

this view - of the long-term homeless participants in this evaluation, nearly two thirds (60%) reported a mental health problem. This is five times higher than the rate among SAAP clients (Australian Institute of Health and Welfare 2007).

Participants who reported mental health problems predominately disclosed axis 1 (or mood) disorders and the most common issue was depression (21%) followed by schizophrenia (18%). Personality disorders, which are more difficult to detect and more pervasive, but require significant treatment and services, are less likely to be disclosed, and consequently are probably underreported (Table B4, Appendix B).

Participants also have moderate levels of stress, significant levels of depression, and severe levels of anxiety according to the Depression Anxiety and Stress Scale (DASS), a reliably administered psychometrically validated tool. Group E had severe levels of depression, whereas Group J only had moderate levels of depression (for more detailed information see Table B5, Appendix B).

Mental illness and substance abuse correlate strongly with long-term homelessness, although the relationship is complex (Kamieniecki 2001; Johnson and Chamberlain 2011). A lack of privacy, stability, security and safety make homelessness highly stressful and depressing. The longer people remain homeless the greater the risk of developing mental health problems. As Terry told us:

...mental health definitely suffers from homelessness. If you have a predisposition to anxiety and depression, it's going to make it worse, especially if you're not medicating yourself ... It's a catch 22. (1091, single, male, late 30s, Group E)

5.4 PROBLEMATIC SUBSTANCE USE

Almost all (89%) of the study participants reported problematic drug and/or alcohol use at the time of the first survey. Again, this is substantially higher than the rate reported among SAAP clients (19%) (Australian Institute of Health and Welfare 2007). Most participants (82%) used illicit drugs, commonly heroin (75%, see Table B6, Appendix B). Of those who had ever used heroin, over 90% reported that they had used it intravenously.

Just under half of the participants (48%) reported problematic alcohol use.

There is a common perception that substance abuse and homelessness are linked but there is considerable contention about the direction of the relationship. The popular perception is that substance abuse causes homelessness, but a number of studies now suggest that homelessness 'induces drug use' (Johnson, Freels, Parsons and Vangeest 1997; Neale 2001; Johnson and Chamberlain 2008a).

Anecdotally, the various stresses experienced by homeless people encourage substance abuse. Drugs are an important way of dealing with the past and coping with the present. One man in his early 40s told us that he used heroin to:

... cope with it. And that's how I coped. I probably managed to cope with it because I was on drugs. I don't know how a sober person could really cope with it. But it must be even harder. Most people on the street end up drinking alcohol or something to try to smooth over the rough edges (1004, single, male, early 40s, Group J).

5.5 TRAUMA

Almost all study participants had experienced childhood trauma, and we believe this is one of the causes contributing to long-term homelessness.

Once someone becomes entrenched in homelessness, further trauma seems inevitable.

Almost all study participants (95%) have experienced significant trauma. Most (75%) have experienced physical assault. Most female participants (66%) and many male participants (29%) reported that they had been raped. The problems are recurring, with 11% of the participants experiencing a physical assault in the six months prior to the first survey (see Table 5 over page). This is consistent with several studies that report alarming rates of violence experienced by homeless people (Newburn and Rock 2005; Robinson 2010).

TABLE 5: EXPERIENCE OF TRAUMA						
	A	\LL	MEN		WOMEN	
	N	%	N	%	N	%
Have children under 18 years	83	44.6	40	35.0	43	53.5
Have had children placed in Child Protection (if have children)	39	71.8	14	50.0	25	84.0
SEXUAL ASSAULT (EVER)						
Raped	66	48.5	31	29.0	35	65.7
Molested (ever)	66	51.5	31	35.5	35	65.7
PHYSICAL ASSAULT						
Ever	69	75.4	33	72.7	36	77.8
Last 6 months	52	11.5	24	12.5	28	10.7
Witnessed someone badly injured	69	66.7	33	63.6	36	69.4
Threatened with a weapon; held captive	68	57.4	33	51.5	35	62.9
Direct combat	69	1.4	33	3.0	36	0.0
Ever involved life threatening accident	69	53.6	33	60.6	36	47.2
Ever involved in fire, flood or other natural disasters	69	34.8	33	42.4	36	27.8
Other	68	36.8	33	27.3	35	45.7
ANY OF THE ABOVE	83	95.2	40	97.5	43	93.0

Note: this table uses questions that have been asked retrospectively in the 6 months follow-up survey.

Homelessness makes such traumatic experiences more likely. Nearly all (98%) of participants had spent periods living in boarding houses. In boarding houses they are exposed to volatile conditions and residents often experience or witness violence and intimidation:

There were a lot of stand overs ... I had a bloke knock on my door once and try to stand over me to try and get my stereo and my CDs, cause he was into the same type of music. And I argued with him and argued with him, and then the bloke next door came out and he said "If you don't piss off, I'll punch your head in (1044, single, male, late 30s, Group J).

Another participant told us about a place he had recently stayed at:

Well, there was a stabbing. There was a stabbing there. Then there was the guy that got beaten up over 10 bucks, happens pretty regularly, for such a little amount of money, 10 bucks (1095rm, single, male, early 40s, Group E).

Most participants (89%) had slept rough at some point and sleeping rough is an extremely traumatic experience as illustrated by the following quotes:

I didn't know if I was going to wake up the next day because I was on the streets in Sydney and this was around the time all these prostitutes were being murdered and I was in that area where they were being murdered. So when I'd go to sleep on a park bench or something I wasn't sure if I was going to wake up or ... yeah I thought I was going to be stabbed or something. It was very, very scary, it was very unsafe (1082, couple, male, late 20s, Group E).

I've been molested as a kid and I could never have, my biggest fear was waking up being raped you know on a park bench and having someone on top of me so I could never stay out on my own because I knew it was out there, I knew what was capable of happening so it was scary, very scary (1092, single, female, mid 40s, Group J).

One woman in her 20s told us about her experiences:

It happens daily out on the streets, violence and intimidation. Platform 13 for example ... That was a really like a hotspot to go, to get there, even if you could get in first and shut the door like that was the place to be for the night. You know, there were groups of people that used to go down there and stand over other homeless people for their squat or for their drugs or for their money or stuff like that. There's a lot of intimidation out there on the streets and everyone wants to be the bigger dog, like everyone wants the reputation not to be messed about (1098, single, female, late 20s, Group E).

Although substance abuse can help people cope with homelessness it can contribute to accommodation loss and poor health, and also leave people vulnerable to violent assault and attack. To finance drug consumption, people often resort to crime or illegal work such as prostitution. A women in her 40s told us that you:

Do that (prostitution) or do crime. And I think I prefer, as bad as it was, because I mean, there's a lot of things I've never told anyone, you know, things that men have done to me is just disgusting, disgusting, you know, I've been raped and all, ... (1092, single, female, mid 40s, Group J).

This exposes them to further health risks and the danger of assault.

For homeless people with children, the removal of their children by Child Protection authorities is another potential source of trauma. The impact on children of placement in Child Protection is well documented (Cashmore and Paxman 1996; Cashmore and Paxman 2006a), but the traumatic effect on parents of having their children removed is less well known. Most often it is women who carry the full emotional burden of separation. Feelings of incompetence, powerlessness, remorse, sadness and betrayal compound existing feelings of grief, shame and self doubt (Fernandez 1996).

Thus almost all long-term homeless adults in this study have experienced physical and sexual assault while homeless, combined with adverse childhood experiences. As a result, trauma pervades almost every aspect of their lives. While just over half (57%) of Australians are exposed to trauma at some point in their lives (Rosenman 2002), almost all the participants in this study had been exposed to trauma, often more than once and starting at an early age.

5.6 INCARCERATION

The long-term homeless have been incarcerated more often than other homeless groups and the general population. Over half of the participants (52%) reported that they had been incarcerated at some point in their lives and most (83%) had been charged for a criminal offence. Some people have concluded from these findings that the long-term homeless are a criminal underclass. However, the crimes committed by the people who are homeless are often trivial (survival based) in nature and more often the homeless are the victims rather than perpetrators of crime (Newburn and Rock 2005).

5.7 EDUCATION, UNEMPLOYMENT AND POVERTY

Most people who are long-term homeless have limited education. Only one in four participants completed schooling beyond year 10 and only one in twenty possessed any kind of post secondary school qualification (See Table B7, Appendix B). Consequently, almost all (96%) of the participants were unemployed or out of the labour market. For those who had ever worked, on average it was nearly six years since they had been full-time paid employees.

Unstable housing often prolongs episodes of unemployment because people who move constantly between insecure accommodation find it difficult to obtain employment. They lack a fixed address, important documentation gets misplaced, it is hard to pay adequate attention to personal hygiene and grooming, and it takes time to obtain food and secure a place to stay, so there is less time for job-hunting and working. The generally low educational attainment and formal qualifications make entry into paid work more difficult and further entrench the cycle of homelessness.

A history of long-term unemployment also creates significant barriers to gaining future paid employment. Any jobs they do gain are likely to be low skilled and low paying, which as a result tend to be more precarious.

Most long-term homeless have limited income as a result of their long-term unemployment. Apart from two people who reported they had no income, all other participants (98%) relied on Centrelink payments, somewhat higher than the 82% of SAAP clients who on entry into the program receive government payments (Australian Institute of Health and Welfare 2009:69). Centrelink payments had been the main source of income for at least the last two years for almost all study participants (93%) (see Table B8, Appendix B). Nearly two thirds (61%) of study participants received a Disability Support Pension (DSP).

5.8 CONCLUSIONS AND CHALLENGES

The profile of the study participants is consistent with the evidence from existing studies of the long-term homeless across a range of demographic and social variables. Almost all participants experienced poor health, substance abuse, repeated trauma, limited education, long-term unemployment and low incomes. As expected, the participants appear to be a distinct group from the short-term homeless.

The challenges facing J2SI and the participants are considerable. Leaving behind well known roles and routines and moving into the unknown is often very uncomfortable, and so it is only natural that some participants seek refuge in environments that are familiar, even if they are harmful. The participants' extended experiences of disadvantage, trauma, and marginalisation must be taken into account in supporting a transition out of homelessness. Their fear and shame are likely to make it difficult to establish stable housing, let alone to participate in mainstream social and economic life.

To break the cycle of homelessness, trauma and self harm it is crucial to create points of stability. The long-term homeless need both material stability in the form of a home, and emotional stability through a long-term relationship with a key worker. However, progress is likely to be slow and involve frequent set-backs given the extent of disadvantage documented in this chapter. The outcome data for the J2SI program should be seen in this context.

6. ONE YEAR INTO THE PILOT

'IN TERMS OF POLICY FORMATION, NOT ONLY MUST WE DETERMINE HOW TO PREVENT HOMELESSNESS ... WE MUST ALSO DETERMINE HOW TO KEEP PEOPLE FROM RE-ENTERING HOMELESSNESS ONCE THEY BECOME HOUSED' (Neil and Fopp, 1993:9)

Twelve months into the evaluation there have been some changes in the circumstances of people in both groups. Some changes are for the better and some for the worse. As we noted earlier, people's circumstances change for a variety of reasons. Consequently not all of Group J's improved circumstances can be attributed to the J2SI program. However, the random treatment assignment does allow us to consider the outcomes of the control group (Group E) as the proxies of the counterfactual outcomes of the treatment group (Group J) had they not participated in the J2SI program.

This chapter presents and discusses the longitudinal data on a number of health, social and economic outcomes from the first 12 months of the program. We begin by briefly describing Group J's engagement with the J2SI program. We then analyse the changes in outcomes for the J2SI participants (Group J) and the control participants (Group E) over the first 12 months. The short-term outcomes are considered statistically significant if the differences in the average outcome between Groups J and E are significantly different from zero. The test results (denoted as p-values) and a brief note on the interpretation of p-values and statistical significance are presented in Appendix C.

6.1 ENGAGEMENT

The program's goals for the first 12 months were relatively modest. They focused on engaging, stabilising and building relationships with the participants. This focus reflects a widely held understanding that clients must be adequately engaged with a service before a

trusted therapeutic alliance or supportive relationship can influence personal growth. Given the extent of childhood trauma, subsequent trauma, and other disadvantages discussed in previous chapters, the process of engaging with the long-term homeless is often complex and it is easy to under-estimate how time consuming it can be. Therefore, when clients do engage with a service, it is a meaningful short-term outcome of program effectiveness and often indicates a willingness of the client to move to the next stage of change (Mowbray, Cohen and Bybee 1993).

Given that most of the participants have extensive and sometimes negative experiences with welfare agencies and State institutions, it was expected that it might take J2SI some time to engage them. Service data partially support this claim. In the first month just over half of the J2SI participants (n=22) were classified as engaged - that is accepting basic services - but a significant minority (n=16) were only partially engaged or at risk of completely disengaging.

Over the next four months the proportion of people J2SI engaged rose steadily to 75%, and after nine months the level of engagement peaked at 92 % (n=37). As noted in Chapter 3 there were a small number of people whose relationship with J2SI fluctuated throughout the year. Some people temporarily disengaged because they moved interstate or were incarcerated. Five did not start the program because their circumstances did not warrant the type of intervention offered by J2SI.

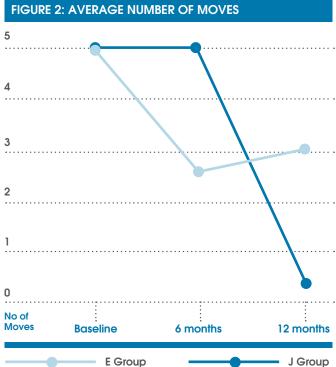
6.2 HOUSING OUTCOMES

As shown in Chapters 4 and 5, long-term homelessness is intertwined with many other social and economic problems, including trauma such as physical or sexual assault, poor physical and mental health, substance misuse, incarceration and poverty. It can also cause acute social isolation. For this reason, securing and stabilising accommodation was a priority for J2SI. The program used its support capacity to leverage rapid access to housing stock from various social housing providers.

The process of moving from homeless to housed is complex and the first six to 12 months are recognised as a 'critical time' where tenancies are at acute risk (Susser, Valencia, Conover, Felix, Tsai and Wyatt 1997). No-one in Group J had lost their housing but the key measure will be how many retain their housing over the next 24 months.

Reflecting their improved housing circumstances, Group J participants also moved less often over the 12 month period (Figure 2).





As Figure 1 indicates there has been a dramatic change in the respondents' housing circumstances. Nearly everyone was homeless on referral, but the housing circumstances of the two Groups diverged sharply after this. After six months, 63% of Group J were housed compared to around 12% of Group E. After 12 months 75% of Group J were suitably housed. While the proportion of Group E who were housed increased to 30% at the 12 month mark, the majority of Group E participants remained homeless. The results at both 6mFU and 12mFU are statistically significant at the 1% level (Table C1-C2, Appendix C).

The average number of moves for Group J participants declined from 5 to 0.4 moves, and from 5 to 3.1 moves for Group E (Table C3, Appendix C). With much more stable housing, we would expect a large majority of Group J to avoid many of the negative impacts associated with constant moving.

In the next section we examine whether the very different housing outcomes were associated with any changes in physical and mental health.

6.3 HEALTH OUTCOMES

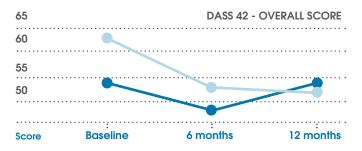
Self-reports of physical health do not provide a consistent pattern. Participants were asked about the level of bodily pain they felt in the past four weeks, ranging from 'no bodily pain' to 'very severe'. For the analysis we re-grouped the responses into no body pain, mild to moderate, and severe pain (Table C4a-C4d, Appendix C). The overall health of Group E decreased as the proportion of respondents with severe bodily pain increased from 19% to 39%. The health of some participants in Group J improved as the proportion of respondents who felt no bodily pain increased from 27% to 33%. However, the proportion of Group J reporting severe bodily pain also increased from 30% to 41%. At this early stage we need to be very cautious about the interpretation of these figures.

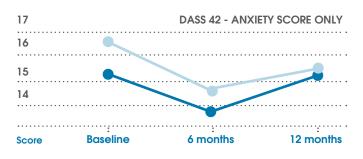
In terms of mental health, we see very small improvements as measured by the DASS. This instrument produces an average mental health score where lower scores mean better mental health. Over the 12 month period the average score for Group E decreased from 63.2 to 52.7 and there was no material change for Group J from 54.5 to 54.2 (Figure 3. See also Table C5a-C5e, Appendix C). The change in Group E was driven by improvements in all dimensions (e.g. stress, anxiety and depression), whereas for Group J it was mainly driven by improvements in the level of depression felt by the respondents.

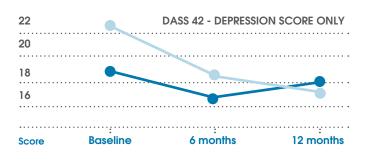
It is possible that the mental health of Group J is not improving despite better housing circumstances because 'becoming' housed can be a stressful process, particularly for people who have not had their own housing for a long time. In most cases the transition from homeless to housed involves leaving a known, albeit harsh, environment which can seriously disrupt people's routines. Over time, if people become accustomed to being housed and develop meaningful routines and interactions with others, we expect to see a reduction in mean DASS scores.

The most extreme health outcome that was not taken into account in the above health measures is the mortality rate among the participants. Two of the Group E participants passed away in the first 12 months. All of the Group J participants remain alive. Losing two lives (out of 54) in one year is certainly not trivial, irrespective of its statistical difference.

FIGURE 3: AVERAGE SCORES IN DASS 42











6.4 HEALTH SERVICE USAGE

Although the data indicate modest changes in physical and mental health status, the use of health services has decreased for J2SI participants (Group J) in the past 12 months. For Group E, changes in their patterns of usage are less clear. The average amount of each of the four types of health service use (emergency ward, psychiatric ward, general hospital and psychiatric unit) per person for Group J is, in general, lower than the average for Group E at 12mFU. However, the differences between the Groups are not statistically significant due to high variation in use among individual participants.

The three graphs presented in Figures 4 to 7 investigate different aspects of the two Groups health service use patterns. The graph on the left hand side represents the average amount of use for all individuals in each Group (average usage). The middle graph shows the proportion of people who used the services (usage rate) and the right hand panel indicates the usage intensity which is the average amount of times a service is used by people who have used it.

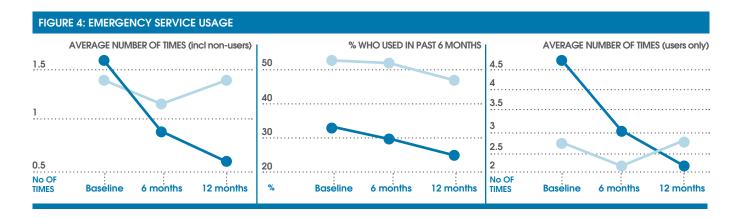
Figure 4 shows that the average usage of emergency services was around 1.5 times per person for both Groups over a six month period at baseline and fell to 0.5 times per person for Group J at 12mFU. The decrease in usage for Group J was mainly driven by the decline in the usage intensity. The proportion of Group J using emergency wards also declined over the 12 month period from 33% to 25%, and for Group E from 52% to 49%. As a result, the gap of emergency ward usage between the two Groups widened slightly and reached a statistically significant difference between the two Groups (24%, p=0.045; see Tables C6-C8, Appendix C).

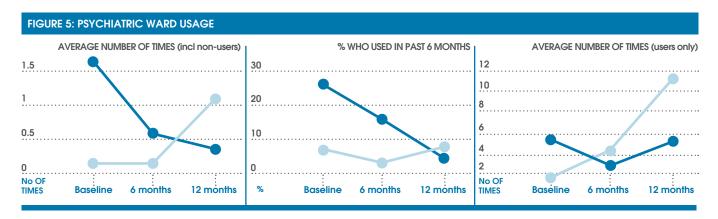
Group J participants also used psychiatric wards much less often after 12 months (Figure 5 opposite). The average number of psychiatric ward visits declined from 1.5 to 0.3 per person. The average for Group E increased from 0.1 to 1.0. The changes for Group J were driven primarily by a smaller proportion of participants using a psychiatric ward, as well as a significant reduction in service usage by one heavy user over

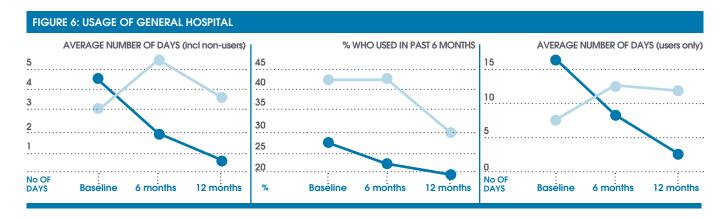
the 12 months. For Group E, the increase is primarily driven by one single individual who was hospitalised in a psychiatric ward for an extended period in the most recent reporting period. However, the number of persons who used psychiatric wards is very small (n=3 for E and n=2 for J) in the 12 month follow up survey. Consequently, these averages of the intensity of psychiatric ward usage should be interpreted with caution (Tables C9-C11, Appendix C). The considerable volatility in the use of psychiatric services will be monitored over the course of the J2SI project.

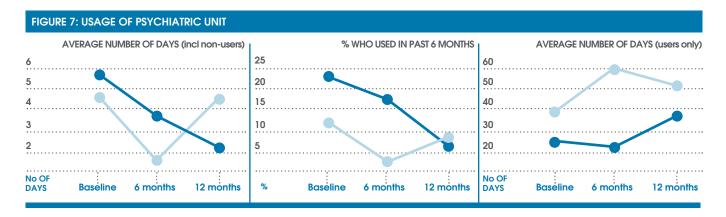
In terms of respondents requiring hospital treatment, over the 12 month period there is a decrease for Group J from 27% to 19%, and a large decrease for Group E from 43 to 30% of respondents (Figure 6. See also Tables C12-C14, Appendix C). In addition, the intensity of usage (the average number of days spent in hospital by those who have been in hospital) reduced considerably from 4.4 to 0.6 for Group J, while usage intensity for Group E increased by 5.1 days. This translates to a clear reduction in average numbers of days in hospital for Group J and a small increase for Group E. At 12mFU, hospital treatment required per person for Group E was 3.1 days higher than Group J. The difference is considerable although not statistically significant (p=0.128) due to large standard errors.

The proportion of Group J participants who were hospitalised in a psychiatric unit decreased from 24% to 5%, whereas it dropped from 12% to 9% for Group E (Figure 7). For both Groups, the number of days hospitalised in a psychiatric unit for those who were admitted has increased over time. However, the spike at the 6mFU for Group E can be explained by a single individual who was in a psychiatric unit for 60 days. For Group J, the increase over time is also largely driven by a single individual who pulls up the Group average. Without this person, the average usage would have declined for Group J from 24 days to 5 days. Averaging across all individuals, the numbers of days in a psychiatric unit for Group J was 2.5 days lower than the average of Group E (Tables C15-C17, Appendix C).









6.5 PROBLEMATIC DRUG USE

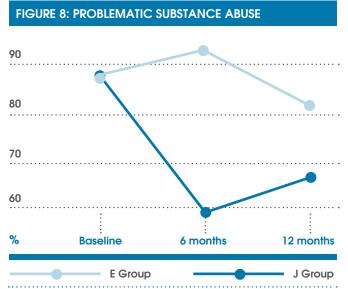
At baseline about 89% of both Group J and Group E reported problematic drug use. Problematic drug use among Group J declined significantly after six months, whereas in Group E it did not change materially. After 12 months, levels of problematic drug use in Group J had increased slightly so that the difference in problematic drug use between Group J and Group E was no longer statistically significant (Figure 8, see also Table C18, Appendix C). However, at the 12mFU the proportion of Group J's respondents reporting a serious drug problem was still 15 percentage points lower compared to Group E. Given that securing assistance and housing from J2SI was not dependent on abstinence from drug use, the result is not surprising. In the US longitudinal studies evaluating Housing First services which operate under harm minimisation principles report high rates of housing retention despite little or no reduction in substance use (Milby, Schumacher, Wallace, Freedman and Vuchinich 2005; Kertesz, Crouch, Milby, Cusimano and Schumacher 2009).

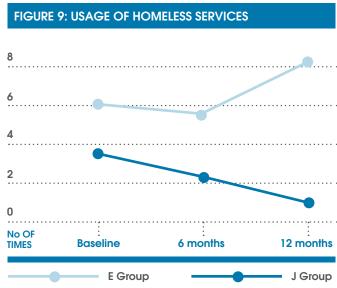
6.6 OTHER SERVICE USAGE

There has been a significant drop in Group J's use of homelessness services from 3.5 to 0.3 occasions and, conversely, an increase in Group E's use from 5.9 to 8.5 (Figure 9, see also Table C19, Appendix C). The difference is however statistically insignificant as it is driven by a small number of people in Group E using homelessness services a large number of times. At the same time there has been a drop in the average use of crisis accommodation for Group J from 0.6 to 0 occasions, and a drop for Group E from 0.3 to 0.2 occasions (p=0.233) (Table C20, Appendix C). These results are not surprising given the improvement of housing circumstances of Group J participants.

Over the 12 months no large changes or significant differences were observed in terms of usage of Job Services Australia (JSA) (Job Network, Disability Employment Network, Personal Support Program) between the two Groups. These results are expected as the majority of the participants are still not employed and are receiving income support payments (Tables C21-C25, Appendix C).

There are no large or significant changes in the other service usage indicators apart from the Sacred Heart Mission meals program. The number of times Group J has used the meals program has more than halved over 12 months and decreased from 76 occasions to 34.8. For Group E, usage has also decreased from 63.8 to 50.2 occasions (p=0.369) (Tables C26-C31, Appendix C).





6.7 SOCIAL ACCEPTANCE AND SUPPORT

Long-term homeless people are often excluded from mainstream social networks, and lack family support (Hawkins and Abrams 2007). However, it is wrong to presume that the long-term homeless lack social networks. They often have complex social networks with distinct normative patterns, codes, rules, lexicons and hierarchies of power, often described as the 'homeless subculture' (Snow and Anderson 1993; Johnson et al. 2008).

However, while the homeless subculture provides some relational and material support, it may also block transitions out of homelessness. The homeless subculture may introduce people to destructive and damaging behaviours that restrict their access to mainstream resources and support. Further, friendships among people experiencing homelessness are often opportunistic in nature and their texture is fragile as they are built on a foundation of self-preservation.

Consequently, while improving participants' social connectedness and sense of belonging within mainstream communities is a core focus of the J2SI program, it potentially represents one of its greatest challenges. Improving social inclusion is likely to require substantial time given the traumatic histories and disadvantages of long-term homeless people.

Self-rated perceptions of social acceptance were measured using an internally consistent scale from six questions used in the study. The items include: In the last six months:

- I have friends I see or talk to every week;
- I have felt accepted by my friends;
- I have felt accepted by society;
- I have felt clear about my rights;
- I have felt that I am playing a useful part in society; and
- I have felt that what I do is valued by others.

Scores range from 0 – 24, with 24 being the highest level of social acceptance. Increasing scores indicate participants feel more socially accepted.

We also developed an internally consistent measure of the amount of social support received from various sources outside relationships with support workers^h.

This scale was derived from seven questions.

The items include:

- I seem to have a lot of friends:
- I have people I can confide in;
- I have someone I can lean on in times of trouble;
- There is someone who can always cheer me up when I am down;
- I enjoy the time I spend with the people who are important to me;
- When something's on my mind, just talking with the people I know can make me feel better; and
- When I need someone to help me out, I can usually find someone.

The highest possible score is 49 and an increase in scores indicates a perceived increase in social support.

Group J and Group E have similar levels of social acceptance and social support. The results have drifted very slightly upwards for both Groups over the first 12 months, but there is not yet any material change (Figure 10, see also Tables C32-C33, Appendix C).

We suspect there are two reasons for this. First, overcoming the stigma of homelessness takes time. Second, it is quite possible that in the process of being re-housed some people in Group J and to a lesser extent Group E, have experienced feelings of decreased social acceptance and support as they have moved away from their existing social networks into areas where they have few if any connections and little or no history.

Programs that attempt to increase social ties among homeless people encounter numerous obstacles. A common policy response is to build peer support networks. These programs can provide a sense of connection with others but they rarely provide bridges that extend people's social networks beyond their immediate social and economic environment.

We also looked at the participants' experiences with the justice system over the 12 month period. We found that there has been a decrease in the proportion of Group J who have been charged with criminal offences from 29% to 18% (for Group E, the proportion drops slightly from 24% to 23%). However, the proportion of participants who have been incarcerated in the past six months is significantly higher amongst Group J than Group E at the six and 12 months follow up (p<0.05 for

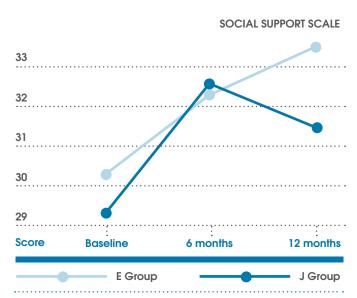
The scale has a Cronbach's alpha score of 0.782, which falls within the accepted range of reliability for a scale measure.

hThe scale has a Cronbach's alpha score of 0.795, which falls within the accepted range of reliability for a scale measure.

each follow up survey). This is largely caused by the same individuals who repeatedly offend rather than a higher number of offenders with single episodes of incarceration (Table C34, Appendix C).

FIGURE 10: SOCIAL ACCEPTANCE SCALE AND SOCIAL SUPPORT SCALE



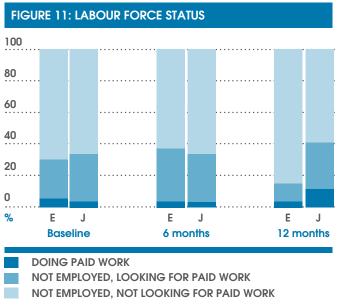


6.8 ECONOMIC PARTICIPATION

Long-term homeless people are economically marginalised. In this report, economic participation is indicated by the proportion of respondents who are either doing paid work or who are looking for paid work. Due to the barriers the long-term homeless face in gaining employment, we expect to see fewer changes in workforce participation in the short-term compared to changes in their housing situation.

After 12 months, the proportion of Group J undertaking paid work has increased from about 3% to 11%, whereas it decreased for Group E from 5% to 3% (Figure 11). These levels of employment are extremely low and reflect entrenched exclusion from the labour market. Integrating participants into the labour force is a long-term goal of J2SI. In this respect, enabling the participants to be ready to work and actively looking for work is another important indicator. At this point they are officially defined as unemployed (if they are not actively looking for work and unemployed they are classified as 'out of the labour force', i.e. economically inactive). After 12 months, the proportion of Group J who are not employed and looking for paid work increased from 27% to 32%. The total labour force participation rate (employed or looking for work) increased from 30% to 42%. By contrast, the labour force participation rate for Group E reduced from 26% to 15%. This has resulted in a 26 percentage points difference between the two Groups 12 months into the trial (p<0.10) (Tables C35-C38, Appendix C).

Despite the entrenched exclusion of the long-term homeless from the labour market, there are early signs that the J2SI program has the potential to make a difference to workforce participation. A few people in Group J have moved into paid employment, and another few have started to actively look for work. By contrast, there has been no material change in the small number of people from Group E in paid emplyment. However, the process of integrating the long-term homeless into the labour market can be expected to be a slow one and will be re-assessed in the next report.



7. THE NEXT STEP

'NO SINGLE INTERVENTION
SEEMS TO SPREAD SUBSTANTIAL
BENEFITS ACROSS MULTIPLE LIFE
DOMAINS' (Rosenheck 2010:32)

After 12 months the overall impression is that there has been some important improvements in the circumstances of J2SI participants relative to Group E. The most dramatic difference is the improved housing circumstances of J2SI participants (Group J). There is an entrenched view among some service providers that the long-term homeless are incapable of maintaining their own housing. The data presented here, along with recent evidence from the U.S., suggest that given the right level of support the long-term homeless can maintain their housing over long periods of time (Stefanic and Tsemberis 2007). To be sure, some Group J tenancies are vulnerable and the data do not necessarily show how some people used their housing irregularly in the initial stages of their tenancy. But the signs are promising nonetheless.

There are also a number of areas where there has been notable but not statistically significant changes. Arguably, the most crucial improvement is the decline in service usage given the costs associated with heavy use of health, justice and homeless services. Substance misuse may be declining. More people in Group J appear to be looking for work, although only a few people have paid jobs. Stable housing, better health, reduced use of services, and higher workforce participation are all good signs. However, there is still much to do.

In most areas there has been little, if any, statistically significant change in average outcomes between the two Groups. This is not surprising given the deep and widespread disadvantages people experiencing long-term homelessness face. Much of the first year

of the program was spent engaging the participants and developing relationships with them. Only once these relationships have formed can we expect to see significant changes. This reminds us that services such as J2SI face huge challenges in working with the most disadvantaged and that short-term support is not sufficient to help the long-term homeless get back on track. Another important point to note is that although some of the observed statistical changes are, on average, quite modest, for the individuals involved they are often major achievements nonetheless.

In short, there is progress but some of the barriers the long-term homeless face are particularly difficult to overcome. While providing the long-term homeless with stable, affordable housing is important, as is access to the health and related services they require, leaving homelessness behind is a taxing process. Formerly homeless people often experience a heightened sense of uncertainly in the early stages as many of their social markers are dislodged. They often find themselves caught in between two worlds - belonging to neither the housed nor the homeless. Moving through this cultural, economic and identity borderland is often difficult. Empirical evidence shows that without ongoing support the long-term homeless often return to their existing social networks that may provide the only sense of belonging they have experienced (Johnson et al. 2008). Thus, the importance of having a longterm intensive support worker may lie less in the role of case coordinators and more in their role of supporting the participants through the liminal space that exists between being housed and being homeless.

Long-term homelessness is clearly underpinned by structural disadvantages such as low education, long-term unemployment and poor health. Resolving long-term homelessness is so difficult because social disadvantage and trauma reinforce each other: a lack of opportunity often leads people to drift into situations where they are exposed to further problems and trauma. Breaking the cycle of homelessness involves the challenge of dealing with a lifetime at the margins of mainstream society that forms the very fabric of individuals' day-to-day life.

The data presented in this report show that long-term homelessness is usually a product of social background and trauma rather than individual choices. To understand issues such as long-term homelessness we need frameworks that recognise the interaction between people's biographical experiences and the social, economic and institutional opportunities available to them. This is not just a trivial academic issue, but an important consideration for program design and service evaluation for the long-term homeless. Indeed, only if service evaluations reflect on the factors that influence people's actions and behaviours, can they provide a deep understanding of why some interventions work and why some do not.

In future reports we intend to examine the type, quality, location and cost of people's housing to see what sort of link there may be to housing retention. We will also continue to examine the health status and social connectedness of participants. And with more data, we will begin to focus on the economic effectiveness (or otherwise) of the J2SI model.

REFERENCES

Australian Institute of Health and Welfare (2007).

Homeless SAAP clients with mental health and substance use problems 2004-05: A report from the SAAP National Data Collection. Canberra, AlHW cat. no AUS 89.

Australian Institute of Health and Welfare (2009).

Homeless people in SAAP: SAAP National Data

Collection Annual Report 2007-2008 Australia. Canberra,

AlHW (cat no Hou 191).

Barber, J. and P. Delfabbro (2004). *Children in Foster Care*. London and New York, Routledge.

Boston Health Care for the Homeless Program. Retrieved 26/5/2011, from http://www.mhsa.net/matriarch/MultiPiecePage.asp__PageID_E_4_A_PageName_E_whatpolicy

Buhrich, N., T. Hodder and M. Teesson (2000). 'Lifetime prevalence of trauma among homeless people in Sydney', in *Australian and New Zealand Journal of Psychiatry* 34: pp. 963-966.

Calsyn, R. and G. Morse (1991). 'Predicting chronic homelessness', in *Urban Affairs Quarterly* 27(1): pp. 155-164.

Cashmore, J. and M. Paxman (1996). *Longitudinal study of wards leaving care*. University of New South Wales, Social Policy Research Centre, Departments of Community Services (N.S.W).

Cashmore, J. and M. Paxman (2006a). 'Predicting aftercare outcomes: The importance of 'felt' security', in *Child and Family Social Work* 11: pp. 232-241.

Chamberlain, C., G. Johnson and J. Theobald (2007). Homelessness in Melbourne: Confronting the Challenge. Melbourne, RMIT University.

Chamberlain, C. and D. Mackenzie (1992). 'Understanding contemporary homelessness: Issues of definition and meaning', in *Australian Journal of Social Issues* 27(4): pp. 274-297.

Clark, H. (2001). 'Violent traumatic events and drug abuse severity', in *Journal of Substance Abuse Treatment* 20: pp. 121-127.

Culhane, D. and S. Metraux (2008). 'Rearranging the Deck Chairs or Reallocating the Lifeboats', in *Journal of the American Planning Association* 74(1): pp. 111-121.

De Vaus, D. (1995). *Surveys in Social Research*. St Leonards, NSW, Allen & Unwin.

Delfabbro, P. and J. Barber (2003). 'Before it's too late: Enhancing the early detection and prevention of long-term placement disruption', in *Children Australia* 28(2): pp. 14-18.

Delfabbro, P., J. Barber and B. Cooper (2000). 'Placement disruption and dislocation in South Australian substitute care', in *Children Australia* 25(2): pp. 16-20.

Dworsky, A. L. and I. Piliavin (2000). 'Homeless Spells Exits and Returns: Substantive and Methodological Elaborations on Recent Studies', in *Social Service Review* 74(2): pp. 193-213.

FaHCSIA (2008). *The road home: A national approach to reducing homelessness.* Canberra, Department of Families, Housing, Community Services and Indigenous Affairs.

Fernandez, E. (1996). Significant harm: Unravelling child protection decisions and substitute care careers of children: Perspectives of child welfare workers and biological parents. Aldershot, UK, Ashgate.

Grace, M., D. Keys, A. Hart and B. Keys (2011). *Achieving* (extra)ordinary aspirations: A research project exploring the role that the Step Ahead program has played in the lives of young people affected by homelessness. Melbourne, Melbourne City Mission.

Hawkins, R. and C. Abrams (2007). 'Disappearing acts: The social networks of formerly homeless individuals with co-occurring disorders', in *Social Science and Medicine* 65: pp. 2031-2042.

Hough, R., H. Tarke, V. Renker, P. Shields and J. Glatstein (1996). 'Recruitment and retention of homeless mentally ill participants in research', in *Journal of Consulting and Clinical Psychology* 64(5): pp. 881-891.

Johnson, G. (2006). On the Move: A Longitudinal Study of Pathways In and Out of Homelessness. <u>School of Global Studies</u>, <u>Social Science and Planning</u>. Melbourne, RMIT University.

Johnson, G. and C. Chamberlain (2008a). 'Homelessness and substance abuse: Which comes first?' in *Australian Social Work* 61(4): pp. 342-356.

Johnson, G. and C. Chamberlain (2008b). 'From Youth to Adult Homelessness', in *Australian Journal of Social Issues* 43(4): pp. 563-582.

Johnson, G. and C. Chamberlain (2011). 'Are the homeless mentally ill?' in *Australian Journal of Social Issues* 46(1): pp.

Johnson, G., H. Gronda and S. Coutts (2008). *On the Outside: Pathways in and out of homelessness.*Melbourne, Australian Scholarly Press.

Johnson, G., N. Natalier, S. Thoresen, M. Liddiard, P. Mendes, N. Bailey and A. Hollows (2010). *Pathways from out-of-home care*. Melbourne., Australian Housing and Urban Research Institute.

Johnson, T., S. Freels, J. Parsons and J. Vangeest (1997). 'Substance abuse and homelessness: Social selection or social adaptation', in *Addiction* 92(4): pp. 437-445.

Kamieniecki, G. (2001). 'Prevalence of psychological distress and psychiatric disorders among homeless youth in Australia: A comparative review', in *Australian and New Zealand Journal of Psychiatry* 35(3): pp. 352-358.

Kertesz, S., K. Crouch, J. Milby, R. Cusimano and J. Schumacher (2009). 'Housing First for homeless persons with active addiction: Are we overreaching?' in *The Milbank Quarterly* 87(2): pp.

Liebow, W. (1993). *Tell them who I am: The lives of homeless women*. New York, Penguin Books.

Milby, J., J. Schumacher, D. Wallace, M. Freedman and R. Vuchinich (2005). 'To house or not to house: The effects of providing housing to homeless substance users in treatment', in *American Journal of Public Health* 95(7): pp. 1259-1265.

Mission Australia and Murdoch University (2011). How homeless men are faring: Some initial outcomes from the Michael project. Sydney, Mission Australia.

Mowbray, C., E. Cohen and D. Bybee (1993). 'The challenge of outcome evaluation in homeless services: Engagement as an intermediate outcome measure', in Evaluation and Program Planning 16(4): pp. 337-346

Neale, J. (2001). 'Homelessness amongst drug users: A double jeopardy explored', in *The International Journal of Drug Policy* 12: pp. 353-369.

Neil, C. and R. Fopp (1993). *Homelessness in Australia:* Causes and Consequences. Melbourne, CSIRO.

Newburn, T. and P. Rock (2005). *Living in fear: Violence and victimisation in the lives of single homeless people.* London UK, Crisis.

Phelan, J. and B. Link (1999). 'Who are "the homeless"? Reconsidering the stability and composition of the homeless population', in *American Journal of Public Health* 89(9): pp. 1334-1338.

Piliavin, I., M. Sosin, A. Westerfelt and R. Matsueda (1993). 'The duration of homeless careers: An exploratory study', in *Social Service Review* 67(4): pp. 576-598.

Pleace, N. (2008). Effective Services for Substance Misuse and Homelessness in Scotland: Evidence from an International Review, Scottish Government Social Research.

Read, J. and C. Ross (2003). 'Psychological Trauma and Psychosis: Another reason why people diagnosed schizophrenic must be offered psychological therapies', in *Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry* 31(3): pp. 247-267.

Robinson, C. (2010). *Rough living: Surviving violence and homelessness.* Broadway N.S.W, U.T.SePress.

Rosenheck, R. (2010). 'Service models and mental heath problems: Cost-effectiveness and policy relevance', in *How to House the Homeless.* I. Ellen and B. O'Flaherty (eds). New York, Russell Sage Foundation.

Rosenman, S. (2002). 'Trauma and post-traumatic stress disorder in Australia: Findings in the population sample of the Australian National Survey of mental health and wellbeing', in *Australian and New Zealand Journal of Psychiatry* 36: pp. 515-520.

RPR Consulting (2003). *Longitudinal survey of Reconnect clients: Statistical report*, RPR Consulting.

Snow, D. and L. Anderson (1993). *Down on their luck: A study of street homeless people*. Berkeley, University of California Press.

Snow, D., S. Baker, L. Anderson and M. Martin (1986). 'The myth of pervasive mental illness among the homeless', in *Social Problems* 33(5): pp. 407-423.

Sosin, M., I. Piliavan and H. Westerfelt (1990). 'Toward a longitudinal analysis of homelessness', in *Journal of Social Issues* 46(4): pp. 157-174.

Stefanic, A. and S. Tsemberis (2007). 'Housing first for long-tem shelter dwelllers with psychiatric disabilities in a suburban county: A four-year study of housing access and retention', in *Journal of Primary Prevention* 28: pp. 265-279.

Stein, M. (2006). 'Research review: Young people leaving care', in *Child and Family Social Work* 11(3): pp. 273-279.

Sullivan, C., M. Rumptz, R. Campbell, K. Eby and W. Davidson II (1996). 'Retaining participants in longitudinal community research: A comprehensive protocol', in *Journal of Applied Behavioral Science* 32(3): pp. 262-276.

Susser, E., E. Valencia, S. Conover, A. Felix, W. Y. Tsai and R. J. Wyatt (1997). 'Preventing recurrent homelessness among mentally ill men: A "critical time" intervention after discharge from a shelter', in *American Journal of Public Health* 87(2): pp. 256-262.

Thomson Goodall and Associates (2001). *Interagency Working Party on Crisis Accommodation: Residents Outcome Study.* Melbourne.

Tsemberis, S. (2010). 'Housing First: Ending homelessness, promoting recovery and reducing cost', in *How to house the homeless*. I. Ellen and B. O'Flaherty (eds). New York, Russell Sage Foundation.

van Doorn, L. (2005). 'Phases in the development of homelessness - a basis for better targeted service interventions', in *Homeless in Europe Winter*. pp. 14-17.

Wong, I. and I. Piliavin (1997). 'A dynamic analysis of homeless-domicile transitions', in *Social Problems* 44(3): pp. 408-423.

Wong, I. and I. Piliavin (2001). 'Stressors, resources and distress among homeless persons: A longitudinal analysis', in *Social Science and Medicine* 52: pp. 1029-1042.

Zugazaga, C. (2004). 'Stressful life event experiences of homeless adults: A comparison of single men, single women and women with children', in *Journal of Community Psychology* 32(6): pp. 643-654.

APPENDIX

APPENDIX A - RETENTION

Tracking homeless people over time is difficult since participants may be lost along the way (sample attrition). Sample attrition is a recognised risk in longitudinal research among mobile and marginalised populations (Sosin et al. 1990; De Vaus 1995; Hough et al. 1996; Sullivan et al. 1996; Wong and Piliavin 1997; Dworsky and Piliavin 2000; Wong and Piliavin 2001). If too many participants drop out of the study, and if they are the most transient or 'unstable' or in some way different from the majority of the sample, then the 'measurement of change may be confounded ... in some systematic way' (Menard, 1991:36).

International research suggests that people who remain engaged with longitudinal projects are often quite different from those who drop-out of the project (Sullivan et al. 1996: 263; Wong and Piliavin 1997). In a study of the relationship between psychological stresses and homelessness, Wong and Piliavin (1997:1033) found that 'study participants who were lost due to attrition ... differed from the follow-up sample in a number of ways'. Compared to the participants, they found those who dropped out were 'less well educated, more likely to have been homeless for one year or more . . . have fewer contacts with relatives and friends, and reported to have few close relationships' (op.cit.,:1033/1034). This implies that those with longer homeless histories would be more prone to dropping out of the study and this is an important factor to take into account when assessing the findings from this or any longitudinal study.

UNDERSTANDING THE RETENTION RATE

Figure A1 maps out the numbers of active trial participants (denoted as n) and survey respondents (denoted as r) in each time period. In total, there are 104 eligible participants (who were long-term homeless at the time of referral and provided consent to the research). In the initial period, 88 participants were recruited and randomly assigned to Group J (n=40) and Group E (n=48). Eight people in Group J dropped out of the trial in the first six months since trial entry due to relocation, imprisonment or unwillingness to continue the program. To replace the 8 Group J participants, 8 additional participants were recruited in the first six months (November 2009 to April 2010) and randomly assigned between Groups J and E, and another 8 were recruited between May and October 2010.

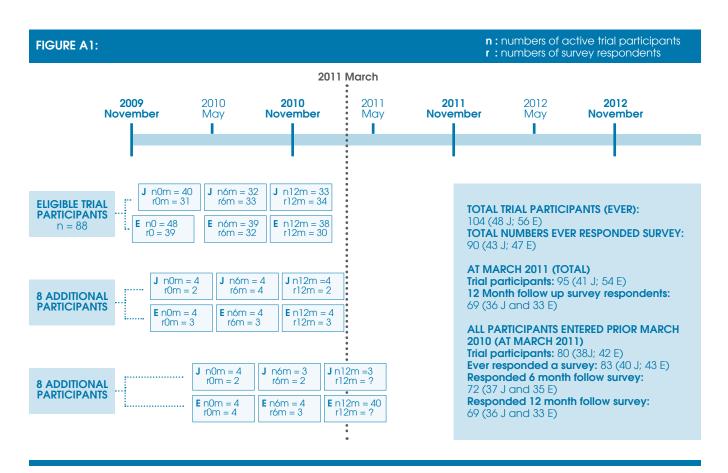
We assume each member of Group E is an active trial participant unless the person explicitly withdrew their consent. No one withdrew consent. Unfortunately, two members of Group E passed away in the first year and this reduced the number of active members to 54 at March 2011.

Ideally, we would like to collect information from all participants who have ever entered the trial unless their consent was withdrawn. We were able to interview some inactive J2SI program participants (Group J) but not all. Given the difficulty of reaching this highly mobile and marginalised sample, no strict fieldwork window is imposed. In principle, the reference window is within three months of each points-in-time. For example, the survey period is six to nine months since trial entry (defined as date of random assignment) for the six month follow up survey and 12-15 month for the 12 month follow up survey. For some individuals whose interviews could not be conducted during the reference window, interviews were conducted as close to the reference window as possible. However, we do impose a rule that a respondent won't be interviewed twice within a four month period.

As a result of flexible interview dates, some participants did not respond to the survey until several months after trial commencement. To avoid biasing the baseline too much, the initial surveys for some individuals were then re-classified as follow-up surveys according to their interview dates. The general rule is that if the interview dates fall in between the 5th month to 10th month since random assignment, the survey was re-classified as six month follow up and re-classified to 12 month follow up for those in between 11th month to 16th month. However, for some cases where there are two interviews within 6 months, some adjustment needs to be made in

order to avoid double counting. The numbers of survey respondents for each point-in-time after re-classification are presented Figure A1.

In this report, we only include individuals who were recruited prior to April 2010 as 12 month follow up surveys are still being filed at the time of data extraction (March 2011) for those who joined the trial later than the cut-off date. In total, 83 people (out of the 96 sample in-use) responded to at least one of the surveys, giving a response rate of 87%. The 12 month retention rate is 83% (69 respondents out of the 83 people who responded to the first survey).



Note: 1. Surveys applied to all individuals including those who dropped out of J2SI program in J group.

2. For E group, only those who were deceased or withdrew consent to the research are considered as not active.

APPENDIX B – SOCIAL AND DEMOGRAPHIC PROFILE

The information presented in the following tables is from the first survey of each individual participated. The average duration between the first survey and the date of trial entry (defined as date of random assignment) is 48 days for Group E and 117 days for Group J.

TABLE B1: A	GE FIRS	MOH T	ELESS BY	GROUP	S J AND E	
	A	LL	GRO	UP J	GRO	UP E
			N			%
0-12		11.1	38	13.2	43	9.3
13-18		42.0	38	42.1	43	41.9
19-24	81		38			
25-30	81	16.0	38	13.2	43	18.6
31-34	81		38			
35-40			38			14.0
41 plus	81	11.1	38	13.2	43	9.3

TABLE B2: HOUSEHOLD TYPE BY GROUPS J AND E											
	ALL		GRO	OUP J	GRO	OUP E					
	N	%	N	%	N	%					
Single	66	79.5	35	87.5	31	72.1					
Couple	7	8.4	1	2.5	6	14.0					
Single Parent	4	4.8	2	5.0	2	4.7					
Couple with children	6	7.2	2	5.0	4	9.3					
TOTAL	83	100	40	100	43	100					

TABLE B3: PHYSICAL H	HEALT	H COND	ITIONS	BY GRO	OUPS J	AND E
	A	ALL	GRO	OUP J	GRO	OUP E
	N	%	N	%	N	%
PHYSICAL HEALTH CONDITIONS	77	84.4	35	74.3	42	92.9
Diseases of the digestive system	77	41.6	35	34.3	42	47.6
Hepatitis C	77	39.0	35	34.3	42	42.9
Cirrhosis	77	2.6	35	0.0	42	4.8
Diseases of the respiratory system	77	39.0	35	40.0	42	38.1
Asthma	77	23.4	35	25.7	42	21.4
Chronic lung disease	77	1.3	35	2.9	42	0.0
Bronchitis	77	10.4	35	8.6	42	11.9
Emphysema	77	9.1	35	8.6	42	9.5
Physical disability/ impairment/ congenital syndrome	77	28.6	35	25.7	42	31.0
Vision impairment	77	11.7	35	5.7	42	16.7
Hearing impairment	77	5.2	35	2.9	42	7.1
Mobility impairment	77	15.6	35	20.0	42	11.9
Diseases of the musculoskeletal system	77	39.0	35	28.6	42	47.6
Arthritis	77	15.6	35	17.1	42	14.3
Chronic neck and/ or back pain	77	31.2	35	22.9	42	38.1
Diseases of the circulatory system	77	15.6	35	20.0	42	11.9
Heart disease	77	5.2	35	8.6	42	2.4
Stroke	77	5.2	35	2.9	42	7.1
		13.0				14.3
Epilepsy	77	13.0				
	77	7.8	35	8.6	42	7.1
Cancer	77	7.8	35	8.6	42	7.1
Diseases of the endocrine, nutritional/ metabolic system		2.6	35	2.9	42	2.4
Diabetes	77	2.6	35	2.9	42	2.4

TABLE B4: MENTAL AND	TABLE B4: MENTAL AND BEHAVIOURAL DISORDER BY GROUPS J AND E											
	A	ALL	GRO	OUP J	GROUP E							
	N			%		%						
	77	18.2	35	25.7	42	11.9						
Depression		20.8	35		42	26.2						
Bi-polar	77											
Intellectual disability	76	10.5	35	11.4	41	9.8						
Anxiety		10.4										
Acquired brain injury						4.8						
Post traumatic stress	77	5.2	35	5.7	42	4.8						

9.5		A	LL	GRO	OUP J	GRO	OUP E
9.8		N	%	N	%	N	%
9.5	Year 7 or below	10	12.2	5	12.5	5	11.9
4.8	Year 8	8	9.8	2	5.0	6	14.3
4.8	Year 9	19	23.2	11	27.5	8	19.0
	Year 10	23	28.0	14	35.0	9	21.4
	Year 11	9	11.0	3	7.5	6	14.3
E	Year 12	4	4.9	2	5.0	2	4.8
PE	TAFE EQUIVALENT						
/IEAN	Year 11	1	1.2	0	0	1	2.4
22.3	Year 12	4	4.9	3	7.5	1	2.4
17.6	Year further	2	2.4	0	0	2	4.8
23.4	University	2	2.4	0	0	2	4.8
63.4	TOTAL	82	100	40	100	42	100

TABLE B7: HIGHEST EDUCATIONAL ATTAINMENT BY GROUPS J AND E

TABLE B5: MEAN SC	ORE	S DASS 4	12, BY	GROUP	SJA	ND E	
	/	ALL	GRO	OUP J	GROUP E		
	N	MEAN	N	MEAN	N	MEAN	
Depression scale DASS 42	81	20.8	39	19.2	42	22.3	
Anxiety scale DASS 42	82	16.6	39	15.5	43	17.6	
Stress scale DASS 42	82	21.8	39	20.1	43	23.4	
DASS 42 total score	81	59.2	39	54.7	42	63.4	

TABLE B6: PROBLEMATIC DRUG USE BY DRUG TYPE										
	EVER	USED	EVER II	NJECTED	USED PAST 6 MONTHS*					
	N	%	N	%	N	%				
Heroin	83	74.7	60	91.7	60	68.3				
Methadone	83	62.7	50	10.0	51	72.5				
Cocaine	81	40.7	30	46.7	32	21.9				
Ice	81	53.1	39	69.2	42	35.7				
Speed	81	77.8	59	72.9	60	30.0				
Benzodiazepines	81	71.6	55	7.3	57	84.2				
Cannabis	81	92.6	75	2.7	74	71.6				
Inhalants	81	3.7	3	0.0	3	0.0				
Other opiates	82	4.9	4	50.0	4	75.0				

TABLE B8: INCOME SOURCE BY GROUPS J AND E											
	A	NLL	GRO	OUP J	GRO	OUP E					
	N %		N	%	N	%					
Not receiving any payments	2	2.4	2	5.0	0	0					
New Start Allowance	26	31.3	11	27.5	15	34.9					
Disability Support Pension	51	61.4	26	65.0	25	58.1					
Parenting Payment Single	2	2.4	0	0	2	4.7					
Parenting Payment Partnered	1	1.2	1	2.5	0	0					
Other	1	1.2	0	0	1	2.3					
TOTAL	83	100	40	100	43	100					

APPENDIX C - OUTCOME DATA

All of these tables have been produced for the unbalanced sample of the data. An unbalanced sample means that not all respondents have completed all three surveys either as a result of sample attrition or because interviews have yet to be completed.

In this report, we present the figures for the first three surveys – baseline (BL) as well as the six and 12 months follow up surveys (6mFU and 12mFU, respectively). P-values on the equality of mean outcomes between J and E at each of the three points-in-time as well as significance level are also presented.

NOTE ON THE P-VALUE:

The p-value is a measure of how much evidence we have against the null hypothesis. In the following tables, the null hypothesis is that the difference in the average outcomes of variable X (the outcome we are testing) between Groups J and E is equal to zero. The p-value represents the probability of obtaining a difference which is more extreme than the difference we currently observed when the true difference is zero. If a p-value is smaller than 0.05, we consider the difference in average outcomes to be significantly different from zero at 5% level.

The p-value takes into account both the magnitude of the estimate (i.e. the difference in means) as well as the dispersion of the X variable. The p-value is smaller when the estimate is more extreme (higher absolute

value), which is intuitive. The p-value is also smaller when the variable is less dispersed (i.e. the estimate is more precise). Sometimes an estimate from a sample can be large in magnitude but imprecisely estimated. As a consequence, the difference in means may not be statistically significant. For example, considering two samples where sample A contains 6 observations with values (3, 4, 4) for Group E and (5, 5, 5) for Group J. Sample B contains values of (1, 2, 6) for Group E and (2, 7, 9) for Group J. The difference in the mean outcomes of X between J and E is statistically significant for set A (p=0.016) but not for set B (p=0.310), even though the absolute difference is much larger in sample B than in sample A.

This illustrates that a statistically significant treatment effect may not necessarily be significant from a policy prospective, and vice versa. A treatment effect estimate can be small in absolute magnitude and yet be statistically significant if the estimate is very precise. However, statistical significance cannot be ignored. If a estimated treatment effect is not statistically significant, the true effect may in fact be zero, even though the magnitude of the estimate is large. The discussion of significance in this paper refers to statistical significance. Whether the treatment effect is significant from policy perspective often involves subjective judgement and we leave this to the readers to determine.

TABLE C1: H	TABLE C1: HOUSING STATUS ^a											
		GROU	P J (%)		GROU	P E (%)						
TIME	Housed	Homeless	Marginal	N	Housed	Homeless	Marginal	N				
Ref#	5.0	90.0	5.0	40	0.0	100.0	0.0	43				
BL	12.1	81.8	6.1	33	2.4	95.2	2.4	42				
6mFU	62.2	27.0	10.8	37	14.3	80.0	5.7	35				
12mFU	75	16.7	8.3	36	30.3	63.6	6.1	33				

"Housed includes those living in either privately rented/owned or public housing at the time of interview. Homeless includes those residing in a community rooming house, hotels or boarding house, transitional/median term accommodation, crisis accommodation, temporarily staying with family or friends, squatting or sleeping rough. Marginally housed refers to those living in caravans, in prison, or other institutional settings at the time of the interview.

At referral

TABLE C2: PI	TABLE C2: PROPORTION HOUSED											
	GROUP	J (%)	GROUP	E (%)	t-test for	equality of m	eans					
TIME	%	N	%	N	Mean Difference	p - value	Signif					
BL	12.1	33	2.4	42	9.7	0.126						
6mFU	62.2	37	14.3	35	47.9	0.000	***					
12mFU	75	36	30.3	33	44.7	0.000	***					

*significant at 10%, **significant at 5% *** significant at 1% Rounding errors may affect mean difference.

TABLE C	3: HOUSING	RELATED M	OVES						
		GROUP J (%))	t-test for	equality of m	eans			
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	5	7.4	33	5	8.3	40	-0.1	0.976	
6mFU	5	7.9	37	2.6	4.3	35	2.4	0.108	***
12mFU	0.4	0.9	36	3.1	4.9	33	-2.6	0.005	

*significant at 10%, **significant at 5% , *** significant at 1% $\,$

TABLE C4	TABLE C4: HEALTH STATUS COMPARED TO 6 MONTHS AGO											
		GRO	OUP J (%)			GRO	UP E (%)					
TIME	SAME	BETTER	WORSE	N	SAME	BETTER	WORSE	N	p - value			
BL	33.3	30.3	36.4	33	26.2	33.3	40.5	42	0.796			
6mFU	27.8	50	22.2	36	22.9	22.9	54.3	35	0.014	***		
12mFU	36.1	36.1	27.8	36	36.4	30.3	33.3	33	0.840			

*significant at 10%, **significant at 5% , *** significant at 1%

TABLE C4B: PROPORTION REPORTING MILD BODILY PAIN IN THE LAST 6 MONTHS											
		GROUP J (%)		GROUP E (%)	t-test for equality of means				
TIME	YES	NO	N	YES	NO	N	Mean Difference	p - value	Signif		
BL	27.3	72.7	33	23.8	76.2	42	3.5	0.738			
6mFU	27.8	72.2	36	17.1	82.9	35	10.6	0.289			
12mFU	33.3	66.7	36	18.2	81.8	33	15.2	0.153			

*significant at 10%, **significant at 5% , *** significant at 1%

	GROUP J (%)				GROUP E (%))	t-test for equality of means			
TIME	YES	NO	N	YES	NO	N	Mean Difference	p - value	Signif	
BL	24.2	75.8	33	38.1	61.9	42	-13.9	0.2		
6mFU	16.7	83.3	36	37.1	62.9	35	-20.5	0.054	*	
12mFU	13.9	86.1	36	24.2	75.8	33	-10.4	0.283		

*significant at 10%, **significant at 5% , *** significant at 1%

TABLE C4	ID: PROPOR	TION REPOR	RTING SEVE	RE BODILY I	PAIN IN THE	LAST 6 MC	ONTHS		
	GROUP J (%)				GROUP E (%)	t-test for equality of means		
TIME	YES	NO	N	YES	NO	N	Mean Difference	p - value	Signif
BL	30.3	69.7	33	19	81	42	11.3	0.273	
6mFU	38.9	61.1	36	11.4	88.6	35	27.5	0.007	***
12mFU	41.7	58.3	36	39.4	60.6	33	2.3	0.85	

*significant at 10%, **significant at 5% , *** significant at 1%

TABLE C	5A: MEAN D	ASS 42 SCO	RE ^a						
		GROUP J (%))		GROUP E (%)	t-test for	equality of m	eans
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	54.5	36.6	33	63.2	31	41	-8.7	0.279	
6mFU	49	33.7	35	53.3	32.7	35	-4.3	0.586	
12mFU	54.2	34.4	36	52.7	30.1	33	1.5	0.848	

^a The Depression, Anxiety, and Stress Scale (DASS) is a statistically validated tool. Mean scores are based on the shortened DASS21 questionnaire with responses multiplied by 2 to standardise with the full instrument. Note a higher mean score indicates decreased emotional and mental wellbeing

.....

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C	5B: DASS 42	- DEPRESSION	ON SCORE						
		GROUP J (%))		GROUP E (%)	t-test for	equality of m	eans
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	19.1	12.6	33	22.5	13.1	42	-3.4	0.261	
6mFU	17.0	13.1	35	18.2	13.6	35	-1.1	0.722	
12mFU	18.0	12.7	36	17.3	12.9	33	0.7	0.814	

*significant at 10%, **significant at 5% , *** significant at 1% $\,$

TABLE C	5C: DASS 42	-ANXIETY S	CORE						
		GROUP J (%))		GROUP E (%)	t-test for equality of means		
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	15.2	13.8	33	17.2	11.5	42	-2.1	0.488	
6mFU	13.8	11.6	35	15.6	11.4	35	-1.8	0.522	
12mFU	15.3	12.7	36	15.5	11.4	33	-0.2	0.952	

*significant at 10%, **significant at 5% , *** significant at 1% $\,$

5D: DASS 42	-ANXIETY S	CORE						
	GROUP J (%))		GROUP E (%))	t-test for equality of means		
MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
15.2	13.8	33	17.2	11.5	42	-2.1	0.488	
13.8	11.6	35	15.6	11.4	35	-1.8	0.522	
15.3	12.7	36	15.5	11.4	33	-0.2	0.952	
	MEAN 15.2 13.8	GROUP J (%) MEAN STDV 15.2 13.8 13.8 11.6	15.2 13.8 33 13.8 11.6 35	GROUP J (%) MEAN STDV N MEAN 15.2 13.8 33 17.2 13.8 11.6 35 15.6	GROUP J (%) GROUP E (%) MEAN STDV N MEAN STDV 15.2 13.8 33 17.2 11.5 13.8 11.6 35 15.6 11.4	GROUP J (%) GROUP E (%) MEAN STDV N MEAN STDV N 15.2 13.8 33 17.2 11.5 42 13.8 11.6 35 15.6 11.4 35	GROUP J (%) GROUP E (%) t-test for MEAN MEAN STDV N Mean Difference 15.2 13.8 33 17.2 11.5 42 -2.1 13.8 11.6 35 15.6 11.4 35 -1.8	GROUP J (%) GROUP E (%) t-test for equality of memory MEAN STDV N Mean Difference p - value 15.2 13.8 33 17.2 11.5 42 -2.1 0.488 13.8 11.6 35 15.6 11.4 35 -1.8 0.522

^{*}significant at 10%, **significant at 5% , *** significant at 1% $\,$

TABLE C	5E: DASS 42	- STRESS SC	ORE						
		GROUP J (%))		GROUP E (%)	t-test for equality of means		
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	20.2	13.1	33	23.4	11.4	42	-3.2	0.273	
6mFU	18.1	11.5	35	19.5	11.5	35	-1.4	0.605	
12mFU	20.9	12.1	36	20	11.9	33	0.9	0.744	

^{*}significant at 10%, **significant at 5% , *** significant at 1% $\,$

TABLE C6: PROPORTION USED EMERGENCY WARD IN PREVIOUS 6 MONTHS												
		GROUP J (%))		GROUP E (%)	t-test for equality of means					
TIME	YES	NO	N	YES	NO	N	Mean Difference	p - value	Signif			
BL	33.3	66.7	33	52.4	47.6	42	-19	0.1	*			
6mFU	29.7	70.3	37	51.4	48.6	35	-21.7	0.063	**			
12mFU	25	75	36	48.5	51.5	33	-23.5	0.045	*			

^{*}significant at 10%, **significant at 5%, *** significant at 1%

TABLE C	7: AVERAGE	NUMBER O	F TIMES US	ED EMERGEN	NCY WARD				
		GROUP J (%))		GROUP E (%)	t-test for equality of means		
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	1.5	4.6	33	1.4	2.4	42	0.1	0.896	
6mFU	0.9	2.3	37	1.1	1.7	35	-0.2	0.646	
12mFU	0.5	1.7	36	1.3	3	33	-0.8	0.187	

^{*}significant at 10%, **significant at 5%, *** significant at 1%

TABLE C	TABLE C8: AVERAGE NUMBER OF TIMES USED EMERGENCY WARD (IF USED)												
		GROUP J (%))		GROUP E (%)	t-test for equality of means						
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif				
BL	4.6	7.2	11	2.7	2.8	22	1.9	0.416					
6mFU	3	3.6	11	2.2	1.9	18	0.8	0.486					
12mFU	2.1	3	9	2.8	4	16	-0.6	0.653					

^{*}significant at 10%, **significant at 5% , *** significant at 1% $\,$

TABLE C9	: PROPORTI	ON USED PS	SYCHIATRIC	WARD IN I	PREVIOUS 6	MONTHS			
		GROUP J (%))		GROUP E (%)	t-test for equality of means		
TIME	YES	NO	N	YES	NO	N	Mean Difference	p - value	Signif
BL	27.3	72.7	33	7.1	92.9	42	20.1	0.027	**
6mFU	16.2	83.8	37	2.9	97.1	35	13.4	0.054	*
12mFU	5.6	94.4	36	9.1	90.9	33	-3.5	0.582	

^{*}significant at 10%, **significant at 5%, *** significant at 1%

TABLE C	TABLE C10: AVERAGE NUMBER OF TIMES USED PSYCHIATRIC WARD											
	GROUP J (%)				GROUP E (%)	t-test for equality of means					
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif			
BL	1.5	6.9	33	0.1	0.5	42	1.4	0.247				
6mFU	0.5	1.7	37	0.1	0.7	35	0.3	0.257				
12mFU	0.3	1.7	36	1	5.2	33	-0.7	0.451				

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C11: AVERAGE NUMBER OF TIMES USED PSYCHIATRIC WARD (IF USED)											
	GROUP J (%)				GROUP E (%))	t-test for equality of means				
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif		
BL	5.7	12.9	9	1.7	1.2	3	4	0.383			
6mFU	2.8	3.5	6	4		1	-1.2				
12mFU	5.5	6.4	2	11.3	16.2	3	-5.8	0.616			

^{*}significant at 10%, **significant at 5% , *** significant at 1% $\,$

TABLE C12: PROPORTION USED HOSPITAL IN PREVIOUS 6 MONTHS											
	GROUP J (%)			GROUP E (%)			t-test for equality of means				
TIME	YES	NO	N	YES	NO	N	Mean Difference	p - value	Signif		
BL	27.3	72.7	33	42.9	57.1	42	-15.6	0.162			
6mFU	21.6	78.4	37	42.9	57.1	35	-21.2	0.056	*		
12mFU	19.4	80.6	36	30.3	69.7	33	-10.9	0.306			

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C13: AVERAGE NUMBER OF DAYS IN HOSPITAL (EXCL. EMERGENCY WARD)											
	GROUP J (%)				GROUP E (%)	t-test for equality of means				
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif		
BL	4.4	14.1	33	3	6.6	42	1.4	0.59			
6mFU	1.9	8.3	37	5.3	13.1	35	-3.3	0.204			
12mFU	0.6	1.6	36	3.6	11.1	33	-3.1	0.128			

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C14: AVERAGE NUMBER OF DAYS USED HOSPITAL IF USED (EXCL. EMERGENCY WARD)											
	GROUP J (%)				GROUP E (%))	t-test for equality of means				
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif		
BL	16.1	24.1	9	6.9	8.7	18	9.2	0.294			
6mFU	8.9	16.8	8	12.3	18	15	-3.4	0.66			
12mFU	3	2.6	7	12	18.1	10	-9	0.154			

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C15: PROPORTION USED PSYCHIATRIC UNIT IN PREVIOUS 6 MONTHS GROUP J (%) **GROUP E (%)** t-test for equality of means YES YES TIME NO Ν NO Ν Mean Difference p - value Signif BL 24.2 75.8 33 11.9 88.1 42 0.181 12.3 6mFU 16.2 83.8 37 2.9 97.1 35 13.4 0.054 9.1 90.9 -3.5 0.582 12mFU 5.6 94.4 36 33

^{*}significant at 10%, **significant at 5% , *** significant at 1%

		GROUP J (%)			GROUP E (%))	t-test for equality of means			
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif	
BL	5.8	14.4	33	4.6	19.3	42	1.2	0.755		
6mFU	3.7	10.2	37	1.7	10.1	35	2	0.410		
12mFU	2.1	11.7	36	4.5	16.5	33	-2.5	0.481		

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C17: AVERAGE NUMBER OF DAYS IN PSYCHIATRIC UNIT IF USED (EXCL. PSYCHIATRIC WARD)

	GROUP J (%)				GROUP E (%)		t-test for equality of means		
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	24	21.3	8	38.6	46.7	5	-14.6	0.540	
6mFU	22.8	15	6	60	-	1	-37.2		
12mFU	37.5	46	2	50	30.8	3	-12.5	0.774	

^{*}significant at 10%, **significant at 5% , *** significant at 1% $\,$

TABLE 18: PROBLEMATIC AND/OR FREQUENT SUBSTANCE USE®

	GROUP J (%)			GROUP E (%)			t-test for equality of means		
TIME	YES	NO	N	YES	NO	N	Mean Difference	p - value	Signif
BL	87.9	12.1	33	88.1	11.9	42	-0.2	0.978	
6mFU	59.5	40.5	37	91.4	8.6	35	-32	0.001	***
12mFU	66.7	33.3	36	81.8	18.2	33	-15.2	0.153	

Problematic and/or frequent substance use includes one or more of the following: alcohol, cannabis, heroin, methadone or other drug replacement, cocaine, ice, speed, benzodiazepines or other non defined substances in the past six months. It does not include the use of nicotine. The primary criterion applied for defining problematic and/or frequent substance use is whether use was reported to be problematic by respondents themselves. The secondary criterion applied is based on self reported frequency of use and or weekly expenditure on substances. For alcohol and cannabis problematic is defined as daily use and/or weekly costs in excess of \$50. For heroin, cocaine, ice, speed problematic is defined as fortnightly or greater and/or weekly costs in excess of \$50. Problematic use of benzodiazepines is included if disclosed as being problematic. This definition relies primarily on self report and not clinical screening of dependency or use and therefore is only indicative of a dependency issue

^{*}significant at 10%, **significant at 5%, *** significant at 1%

TABLE C19: AVERAGE NUMBER OF TIMES USED HOMELESSNESS SERVICE											
	GROUP J (%)			GROUP E (%)			t-test for equality of means				
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif		
BL	3.5	5.2	33	5.9	9	42	-2.4	0.156			
6mFU	2.2	8.4	35	5.7	19.3	35	-3.6	0.321			
12mFU	0.9	4	36	8.1	29.5	33	-7.2	0.175			

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C20: AVERAGE NUMBER OF TIMES USED CRISIS ACCOMMODATION FACILITY											
		GROUP J (%))		GROUP E (%)	t-test for equality of means				
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif		
BL	0.6	0.9	33	0.3	0.7	42	0.4	0.066	*		
6mFU	0.4	1.1	35	0.7	2.2	35	-0.2	0.58			
12mFU	0	0.2	36	0.2	0.6	33	-0.2	0.152			

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C21: AVERAGE NUMBER OF TIMES USED JSA-JOB NETWORK												
	GROUP J (%)				GROUP E (%)	t-test for equality of means					
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif			
BL	0.8	2	33	1.5	6.3	42	-0.7	0.513				
6mFU	0.1	0.2	36	0.7	2.4	35	-0.7	0.116				
12mFU	0.3	1.2	36	0.2	1.1	33	0.1	0.731				

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C22: AVERAGE NUMBER OF TIMES USED JSA-PERSONAL SUPPORT PROGRAM												
	GROUP J (%)			GROUP E (%)	t-test for equality of means						
MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif				
0.2	0.9	33	0.3	2	42	-0.2	0.648					
0.8	3	36	1	4.5	35	-0.2	0.832					
0.7	3	36	0	0.2	33	0.7	0.179					
		GROUP J (%) MEAN STDV	GROUP J (%) MEAN STDV N 0.2 0.9 33 0.8 3 36	GROUP J (%) MEAN STDV N MEAN 0.2 0.9 33 0.3 0.8 3 36 1	GROUP J (%) GROUP E (%) MEAN STDV N MEAN STDV 0.2 0.9 33 0.3 2 0.8 3 36 1 4.5	GROUP J (%) GROUP E (%) MEAN STDV N MEAN STDV N 0.2 0.9 33 0.3 2 42 0.8 3 36 1 4.5 35	GROUP J (%) GROUP E (%) t-test for MEAN MEAN STDV N Mean Difference 0.2 0.9 33 0.3 2 42 -0.2 0.8 3 36 1 4.5 35 -0.2	GROUP J (%) GROUP E (%) t-test for equality of m MEAN STDV N Mean Difference p - value 0.2 0.9 33 0.3 2 42 -0.2 0.648 0.8 3 36 1 4.5 35 -0.2 0.832				

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C	23: AVERAG	E NUMBER (OF TIMES U	SED OF JSA	-OTHER				
		GROUP J (%))		GROUP E (%)	t-test for	equality of m	eans
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	0	0	33	0.3	0.9	42	-0.3	0.05	*
6mFU	0	0	36	0	0	35	0		
12mFU	0	0.2	36	1.6	9.1	33	-1.5	0.333	

^{*}significant at 10%, **significant at 5%, *** significant at 1%

TABLE C24: AVERAGE NUMBER OF TIMES USED 'ALL OTHER EMPLOYMENT SERVICES'

		GROUP J (%))		GROUP E (%))	t-test for equality of means			
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif	
BL	0	0	33	0	42	0				
6mFU	0	0	36	0	35	0	·			
12mFU	2.2	9.6	36	0	33	2.2	0.172			

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C25: AVERAGE NUMBER OF TIMES USED DISABILITY EMPLOYMENT NETWORK

		GROUP J (%))		GROUP E (%))	t-test for equality of means			
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif	
BL	0.2	0.7	33	0	0.2	42	0.2	0.228		
6mFU	0	0	36	0	0.2	35	0	0.324		
12mFU	0.2	1	36	0	0	33	0.2	0.255		

^{*}significant at 10%, **significant at 5%, *** significant at 1%

TABLE C26: AVERAGE NUMBER OF TIMES USED PARENTING SUPPORT SERVICE

		GROUP J (%))		GROUP E (%)	t-test for equality of means			
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif	
BL	0.5	1.7	12	4.3	9	19	-3.8	0.088	*	
6mFU	0.3	1.1	14	10.9	25.1	17	-10.7	0.099	*	
12mFU	0.7	1.9	14	5.2	10.1	18	-4.5	0.083	*	

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C27: AVERAGE NUMBER OF TIMES USED NEIGHBORHOOD HOUSE/COMMUNITY CENTRE

		GROUP J (%)		GROUP E (%))	t-test for equality of means			
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	19.8	46.1	33	13.9	37.1	42	5.9	0.55	
6mFU	7.7	20.1	36	18.2	44.8	35	-10.5	0.211	
12mFU	4.8	12.5	36	5.8	21.3	33	-1.1	0.803	

^{*}significant at 10%, **significant at 5% , *** significant at 1% $\,$

TABLE C28: AVERAGE NUMBER OF TIMES USED CONSUMER OR TENANCY SERVICE

		GROUP J (%))		GROUP E (%))	t-test for equality of means			
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif	
BL	0.1	0.4	33	4	24.1	42	-3.9	0.299		
6mFU	0.1	0.4	36	0.1	0.5	35	0	0.777		
12mFU	0.1	0.7	36	0.7	4.2	33	-0.6	0.408		

^{*}significant at 10%, **significant at 5%, *** significant at 1%

TABLE C	29: AVERAG	E NUMBER (OF TIMES U	SED FAMILY	VIOLENCE	SERVICES			
		GROUP J (%))		GROUP E (%)	t-test for	equality of m	eans
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	1.2	4.9	33	0.7	4	42	0.5	0.628	
6mFU	0	0	36	0	0	35	0		
12mFU	0	0	36	0	0	33	0		

^{*}significant at 10%, **significant at 5% , *** significant at 1% $\,$

TABLE C	30: AVERAG	E NUMBER (OF TIMES U	SED 'OTHER	SERVICES'				
		GROUP J (%))		GROUP E (%)	t-test for	equality of m	eans
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	0.9	4.5	33	0	0.2	42	0.9	0.286	
6mFU	2.3	13	36	0.1	0.5	35	2.2	0.325	
12mFU	0.2	1.3	36	1.2	6.8	33	-1	0.43	

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C	31: AVERAG	E NUMBER (OF TIMES U	SED MEALS F	PROGRAM				
		GROUP J (%))		GROUP E (%)	t-test for equality of means		
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	76	73.7	33	67	70.8	42	8.9	0.597	
6mFU	44.3	63.7	35	53.1	66.2	35	-8.7	0.575	
12mFU	34	67.9	36	48.5	65.7	33	-14.5	0.371	

^{*}significant at 10%, **significant at 5% , *** significant at 1%

		GROUP J (%)			GROUP E (%))	t-test for equality of means		
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	14.9	4.6	31	14.2	4.7	40	0.7	0.53	
5mFU	16.3	4.5	30	15.9	5.3	35	0.4	0.712	
12mFU	16.4	5.2	28	16.6	5	27	-0.2	0.886	

^{*}significant at 10%, **significant at 5% , *** significant at 1% $\,$

TABLE C	33: SCALE O	F SOCIAL SI	JPPORT						
		GROUP J (%))		GROUP E (%)	t-test for	equality of m	eans
TIME	MEAN	STDV	N	MEAN	STDV	N	Mean Difference	p - value	Signif
BL	29.2	8.5	32	30.3	11.2	39	-1.1	0.652	
6mFU	32.5	10.3	30	32.3	11.2	34	0.2	0.949	
12mFU	31.5	12.6	27	33.3	10.8	29	-1.9	0.557	

^{*}significant at 10%, **significant at 5%, *** significant at 1%

TABLE C3	4: PROPOR	TION INCAR	CERATED I	N PREVIOUS	S 6 MONTHS	;			
	GROUP J (%)			GROUP E (%)			t-test for equality of means		
TIME	YES	NO	N	YES	NO	N	Mean Difference	p - value	Signif
BL	16.7	83.3	18	5.6	94.4	18	11.1	0.304	
6mFU	15.2	84.8	33	0	100	35	15.2	0.023	**
12mFU	14.3	85.7	35	0	100	32	14.3	0.023	**

^{*}significant at 10%, **significant at 5% , *** significant at 1% $\,$

TABLE C3	5: PROPOR	TION DOING	PAID WO	RK					
		GROUP J (%)	t-test for equality of means						
TIME	YES	NO	N	YES	NO	N	Mean Difference	p - value	Signif
BL	3.0	97	33	4.8	95.2	42	-1.7	0.701	
6mFU	2.7	97.3	37	2.9	97.1	35	-0.2	0.969	
12mFU	11.1	88.9	36	3.0	97	33	8.1	0.192	

^{*}significant at 10%, **significant at 5% , *** significant at 1% $\,$

TABLE C3	6: PROPORT	TION NOT E	MPLOYED /	AND LOOKI	NG FOR PAI	D WORK			
	GROUP J (%)			GROUP E (%)			t-test for equality of means		
TIME	YES	NO	N	YES	NO	N	Mean Difference	p - value	Signif
BL	27.3	72.7	33	21.4	78.6	42	5.8	0.567	
6mFU	27.0	73	37	31.4	68.6	35	-4.4	0.687	
12mFU	30.6	69.4	36	12.1	87.9	33	18.4	0.062	*

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C3	37: PROPOR	TION NOT E	MPLOYED /	AND NOT LO	OKING FO	R PAID WC	DRK		
	GROUP J (%)			GROUP E (%)			t-test for equality of means		
TIME	YES	NO	N	YES	NO	N	Mean Difference	p - value	Signif
BL	69.7	30.3	33	73.8	26.2	42	-4.1	0.700	
6mFU	70.3	29.7	37	65.7	34.3	35	4.6	0.684	
12mFU	58.3	41.7	36	84.8	15.2	33	-26.5	0.014	**

^{*}significant at 10%, **significant at 5% , *** significant at 1%

TABLE C3	8: PROPOR	TION CURRE	NTLY DOIN	IG UNPAID	WORK				
		GROUP J (%))		GROUP E (%)	t-test for	eans	
TIME	YES	NO	N	YES	NO	N	Mean Difference	p - value	Signif
BL	6.1	93.9	33	11.9	88.1	42	-5.8	0.378	
6mFU	10.8	89.2	37	5.7	94.3	35	5.1	0.438	
12mFU	5.6	94.4	36	3	97	33	2.5	0.609	

^{*}significant at 10%, **significant at 5%, *** significant at 1%

This is the second in a series of five reports on the J2SI evaluation.
The next three reports provide a full analysis of the housing, health, social and economic outcomes of the participants in the J2SI evaluation.
 The third report is due for release in July 2012. The fourth report is due for release July 2013. The final report is due for release in July 2014.
For further information about the J2SI evaluation contact: guy.johnson@rmit.edu.au