

PARC Service Evaluation Project Update

Adam Zimmermann & Lisa Thompson
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1. STUDY AIMS

The Prevention and Recovery Care (PARC) service is a relatively new service type, sitting between acute and community/residential settings within a continuity of care model. In 2011, Neami Limited, Doutta Galla Community Health and North Western Mental Health partnered to conduct a 2-year project evaluating the effectiveness of the Northern and Arion PARC services. The effectiveness of these services is being measured by collecting information on psychological wellbeing at pre, post and follow-up time points and service utilisation data such as, the number and length psychiatric inpatient admissions for 12 months pre and 12 months post first admission to PARC and the number and length of PARC admissions for 12 months following their first admission.

This study will add to the body of evidence regarding the PARC service as a model of mental health service delivery and evaluate the usefulness and impact of the service on outcomes for consumers. The findings will also assist in determining the cost effectiveness of the PARC service in preventing and reducing the length of stay of hospital admissions.

2. DESIGN

The study utilises a mixed methods design, employing a number of methods to collect data at various time points:

- An analysis of consumer information from databases used at the PARC service will be conducted to gather demographic and service usage data, such as inpatient and PARC service admissions
- Upon entry to and exit from the PARC service, participants complete a range of assessments administered by Support Workers (detailed below)
- Participants' Active Health Plans photocopied at exit and content analysis undertaken
- Within 7 – 10 days of exiting the PARC, participants complete a phone interview with a member of the Research Team, exploring their experiences of the PARC service
- A follow up is completed with participants 2 – 3 months after exiting, in which participants complete the STORI and RAS with the Research Team.
- If a participant nominates a carer during the consent process, the Research Team will make contact with them to discuss the study. If the carer agrees to participate an interview is conducted with them 7-10 days after their family member/friend exits the PARC service to gather information about their experiences and perceptions of the service.

3. MEASURES

The following measures are administered upon entry and exit to the PARC service by a support worker and clinician. The referring support worker or clinician completes the CANSAS-S as part of the referral and entry process. The STORI and RAS are also readministered via a phone interview by the Research Team, 2-3 months after the participant exits the PARC service.

- HONOS: Health and social functioning
- CANSAS-S: Staff perceptions of met and unmet needs
- STORI 30: Recovery (also administered at follow-up)
- RAS Short Form (24 item): Recovery (also administered at follow-up)
- K10: Psychological distress
- CANSAS-P: Participants' perceptions of met and unmet needs

The STORI and RAS are both measures of recovery, the STORI reflecting stages of recovery and the RAS measures dimensions of personal capacity. Factor analysis of the RAS indicates that the five dimensions are implicated in psychological wellbeing. High scores on the RAS subscales are an indication of increased levels of self-esteem, self-empowerment, positive relationships with social support and quality of life. The names of each subscale and associated score ranges are provided below:

- Personal Confidence and Hope (0-45)
- Willingness to Ask for Help (0-15)
- Goal and Success Orientation (0-25)
- Reliance on Others (0-15)
- Not Dominated by Symptoms (0-15)

(Corrigan, Salzer, Ralph, Sangster, & Keck, 2004)

As individuals progress in their recovery journey, previous research indicates that scores on the RAS subscales will increase and be positively correlated with high scores in the later stages of recovery as identified by the STORI. Additionally, previous studies have also demonstrated that higher scores in the RAS subscales will be negatively correlated with high scores for the *Moratorium* subscale on the STORI, i.e. high scores on the RAS subscales will be linked with low scores for the *Moratorium* subscale.

Factor analysis of the STORI reveals five stages representing the recovery journey. The measure assumes that an individual moves through these stages (not necessarily sequentially) during their recovery. Each subscale has a total potential score of 30 with the subscale with the highest score upon completion providing a representation of the person's stage of recovery.

1. Moratorium
2. Awareness
3. Preparation
4. Rebuilding
5. Growth

(Andresen, Caputi & Oades, 2006).

4. PARTICIPANTS

As at September 4th, 2012, 47 people have agreed to take part in the study, representing an overall response rate of 38% (35% at Northern, and 42% at Arion). To date, participants include 26 females and 21 males with an average age of 40 years. Four carers were nominated by participants and two agreed to participate in the study.

5. PRELIMINARY RESULTS

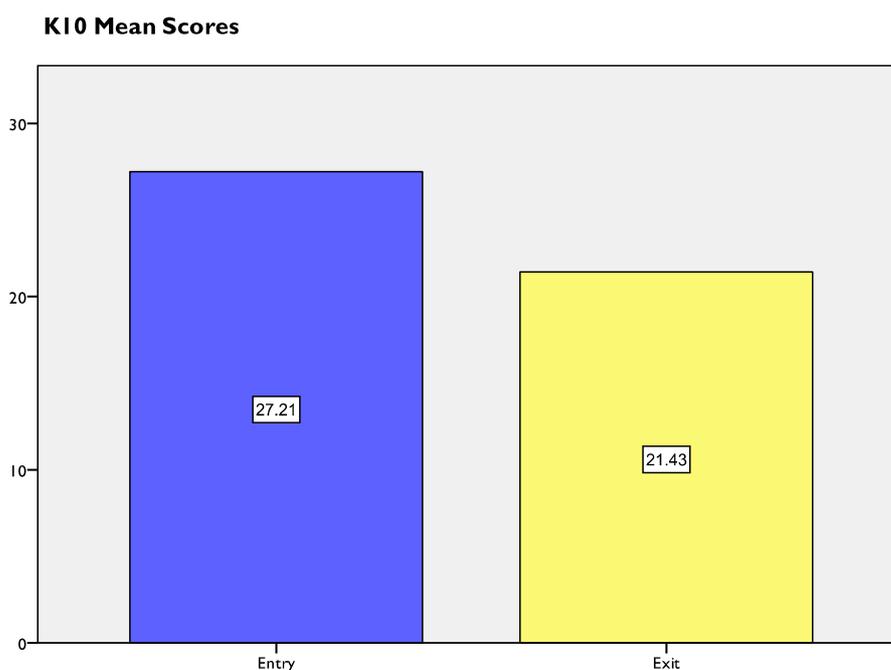
Preliminary data analysis has revealed encouraging results demonstrating a number of positive outcomes for study participants.

5.1 K10

A paired sample t-test indicated that there was a statistically significant decrease in K10 scores from Entry (27.21) to Exit (21.43), $p=0.001$. This finding suggests that staying at the PARCS is effective in reducing levels of psychological distress. K10 scores under 20 indicate that an individual has very low levels of psychological distress.

| K10 Score | Level of psychological distress |
|-----------|---------------------------------|
| 10 – 19 | None |
| 20 – 24 | Mild |
| 25 – 29 | Moderate |
| 30 – 50 | Severe |

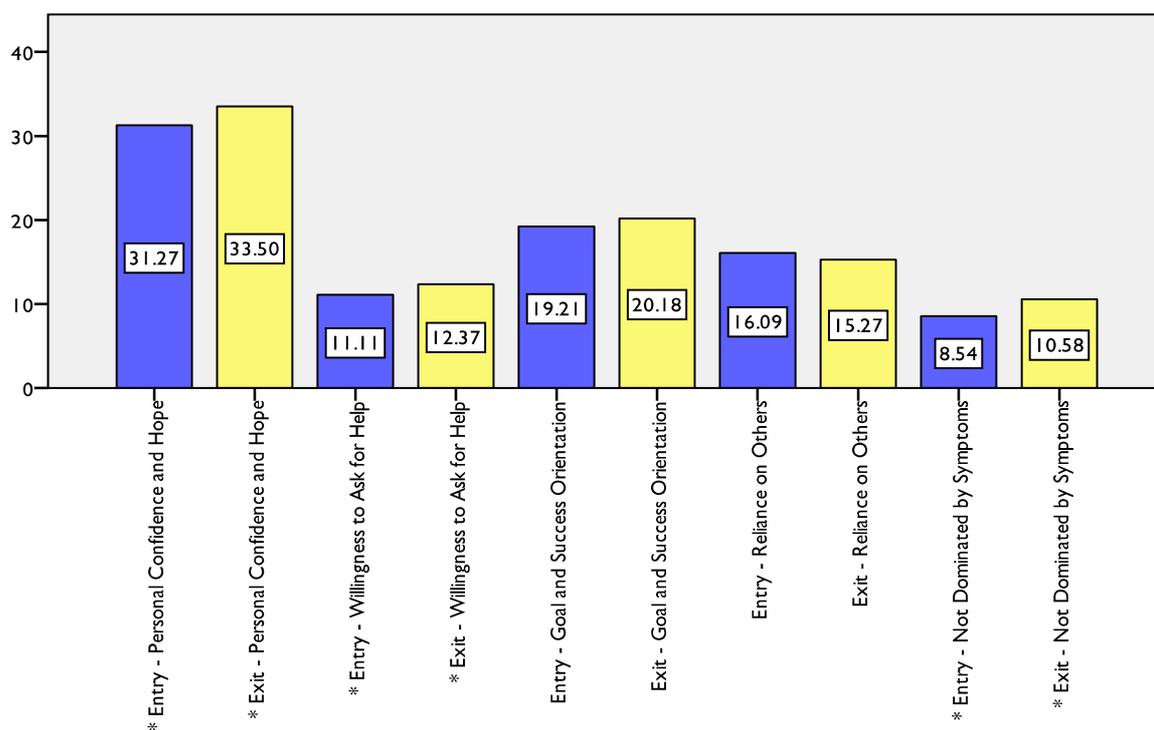
There were no statistically significant differences in K10 scores between males and females, nor were there statistically significant differences in K10 scores between sites, suggesting that the decreases in psychological distress are attributable to the PARCS themselves, rather than other potential factors. The figure below represents the mean K10 scores at Entry and Exit:



5.2 RAS

A paired samples t-test was also conducted to explore changes in the dimensions of the RAS from Entry to Exit. Statistically significant increases were noted in *Personal Confidence and Hope* (Entry=31.27, Exit=33.50), $p=0.046$, *Willingness to Ask for Help* (Entry=11.11, Exit=12.37), $p=0.043$ and *Not Dominated by Symptoms* (Entry=8.54, Exit=10.58), $p=0.016$. Subscale scores for *Goal Success and Orientation* increased and *Reliance on Others* decreased, but these changes did not reach statistical significance. The figure below indicates changes in mean scores on each RAS dimension from Entry to Exit.

Recovery Assessment Scale Mean Scores



* = Significant at 0.05 level

On Entry to the PARCS, a moderate correlation* was observed between low psychological distress on the K10 and higher *Personal Confidence and Hope* ($r=-0.459$, $p=0.006$) and *No Domination by Symptoms* ($r=-0.433$, $p=0.003$). At Exit, low psychological distress was strongly correlated with high levels of *Personal Confidence and Hope* ($r=-0.701$, $p=0.00$), *Willingness to Ask for Help* ($r=-0.620$, $p=0.001$), *Goal and Success Orientation* ($r=-0.608$, $p=0.001$) and *No Domination by Symptoms* ($r=-0.531$, $p=0.004$).

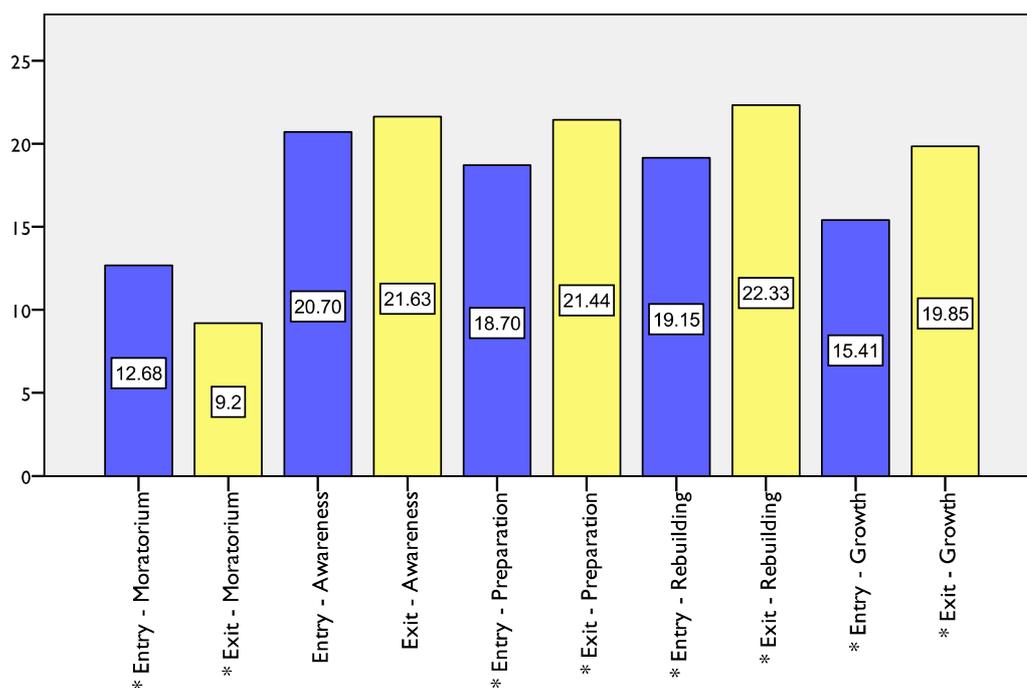
*

| Correlation | Strength / Effect Size |
|-------------|------------------------|
| 0.10 – 0.29 | Weak |
| 0.30 – 0.49 | Moderate |
| 0.50-1.0 | Strong |

5.3 STORI

To examine changes in the STORI from Entry to Exit, a paired samples t-test was conducted on the data. As evidenced in the figure below, mean scores in the *Moratorium* subscale decreased significantly from Entry to Exit, whereas mean scores on the other scales increased. All of these changes to subscale scores reached statistical significance, except for those to the *Awareness* subscale.

Stages of Recovery Instrument Mean Scores



* = Significant at 0.05 level

On Entry, there was a strong positive link between scores on the K10 and the STORI subscales, with high psychological distress associated with high scores for the *Moratorium* subscale ($r=0.748$, $p=0.00$), whereas low psychological distress was associated with high scores for Growth ($r=-0.541$, $p=0.00$). At Exit, there was also a significant relationship between lower psychological distress and the stages *Preparation* ($r=-0.507$, $p=0.006$), *Rebuilding* ($r=-0.539$, $p=0.002$) and *Growth* ($r=-0.677$, $p=0.00$)

Prior to commencing the study it was hypothesised that high scores on the RAS subscales would be positively correlated with scores on later stages of the STORI. An analysis of the data revealed that there were significant correlations between almost all RAS subscales and the STORI subscales on Entry and Exit from the PARC service. On Entry, there were numerous moderate and strong correlations between each of the RAS and STORI subscales, including negative correlations between high scores on the RAS and low scores for the *Moratorium* subscale.

On Exit, the *Preparation* stage was strongly positively correlated with the RAS subscales *Personal Confidence and Hope* ($r=0.676$, $p=0.00$), *Willingness to Ask for Help* ($r=0.665$, $p=0.001$), *Goal and Success Orientation* ($r=0.610$, $p=0.002$) and *Not Dominated by Symptoms* ($r=0.730$, $p=0.00$). There was a moderate correlation with *Reliance on Others*, which was not statistically significant. These data, when taken together, suggest that higher scores on the RAS subscales indicate a likelihood of an individual being in the later stages of recovery identified by the STORI. Except for one moderate correlation between the STORI subscale *Rebuilding* and the RAS subscale *Reliance on Others*, all correlations between STORI subscales *Rebuilding* and *Growth* and each of the RAS subscales were strong.

These results provide further evidence to suggest that the STORI and the RAS are measuring similar constructs. The findings also contribute to further validating the newly developed STORI as a reliable and valid measurement of recovery.

5.4 CANSAS-P

Analysis of CANSAS-P data indicates that participants perceive their unmet needs to decrease markedly during their stay in the PARCS. Upon Entry, participants reported 184 unmet needs, with an average of 4.09 unmet needs. At Exit, participants reported 76 unmet needs, with the average decreasing to 1.69 unmet needs. The most frequently reported unmet need at each time point was psychological distress (26 people at Entry, and 8 at Exit).

5.5 EXIT INTERVIEW

To date, 25 exit interviews have been conducted with consumers 7 – 10 days after they have left the PARCS. Below is a summary of these findings:

- 96% of participants were either very satisfied (56%) or satisfied (40%) with their stay at the PARC service.
- 96% of participants rated the level of support provided by staff to be either very good (72%) or good (24%).
- 79% of participants rated their involvement in the group work to be either very good (46%) or good (33%).
- 84% of participants thought the structure/routine within the PARC service was either very good (52%) or good (32%).

Commentary made during the post-exit interview also reflects participants' high levels of satisfaction with their experiences of the PARCS:

- "I learned to be grounded at PARC, and have since found the techniques that I learned there to be beneficial for staying well"
- "The staff were wonderful, and the facilities were great"
- "They couldn't do better if they tried. There's always someone to talk to – the staff were very good like that"
- "It's comforting knowing that there's a place like PARC when you're unwell"
- "I would like to see more programs and activities, e.g. sports, outings etc."
- "It was good to have time out in a safe environment, to have support when needed, and not having to cook every night"

6. CONCLUSIONS

Overall, the data collected to date provides an indication that staying in the PARC service can be beneficial to increasing participants' wellbeing across a number of domains. Detailed information on the participants including key demographic details and information about in-patient and PARC service usage will be extracted from the CMI database stored with North Western Mental Health 12 months after the data collection from PARC residents has been completed in December 2013.