

Is Recovery from Drug and Alcohol Addiction Contagious?

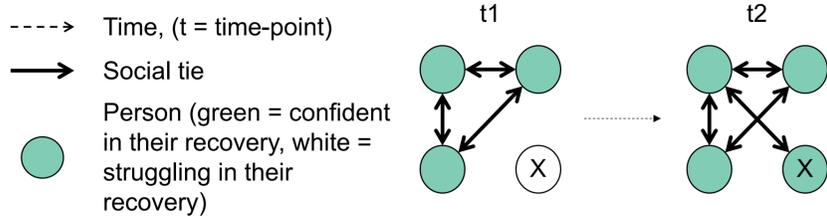
A Pilot Study of a Social Network Approach

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BACKGROUND

- Changes in an individual's social network can impact their recovery ¹.



- Previous data collection has been too infrequent to infer a temporal relationship; it is unclear whether one's social network or their recovery status changes first.
- Two competing theories can explain the direction of the relationship:
 - Social influence:** Recovery status is contagious.
 - Social selection:** A person's recovery status dictates who they choose to spend time with. Split into:
 - Homophily:** People choose to spend time with those similar to them.
 - Popularity:** Everyone chooses to spend time with people who have a favourable attribute.

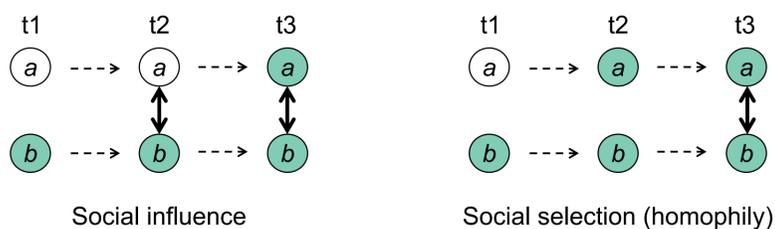


Figure 1: Sequence of changes different in social selection and social influence.

- Knowing the direction of effect can inform interventions.

AIM

Determine the feasibility of using a Stochastic-Actor Orientated Model (SAOM) to explore the relationship between daily social interactions and daily recovery status.

METHODS

14 drug-free participants from a residential rehabilitation programme completed a daily diary for 6 weeks.
 Average length of abstinence: 18 days

Daily Diary

Participants nominated individuals they had positive and negative interactions with.

Recovery measures were exploratory, and were adapted from a well validated scale ²:

- A** 'I am making progress in my recovery journey'

I am making no progress at all 1 2 3 4 5 6 7 8 9 10 I could not be doing any more than I am

Recovery measures b-f responded to on a 7-point Likert scale:

- B** 'I am coping with the stresses in my life'
C 'Having a sense of purpose in life is important to my recovery journey'
D 'It will be important for me to contribute to society and be involved in activities that contribute to my community'
E 'I feel I am in control of my drug/alcohol use'
F 'Thoughts about using drugs/alcohol pop into my head'

RESULTS

- Daily collection of measures was acceptable and feasible.
- Graphs displaying the most (measure A) and least (measure D) variable recovery measures are displayed below.

Figure 2 & 3: Graphs showing each participants median response during the time of data collection to recovery measures. The 95% confidence intervals are shown.

The graphs show how the responses varied between the individuals and how variable the individuals response was to the question. The wider the confidence intervals the more variable the responses.

Figure 2: Participants responses to recovery measure A

Overall range: 3 – 10

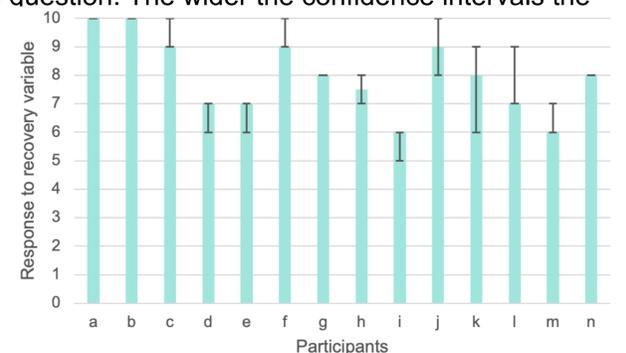


Figure 3: Participants responses to recovery measure D

Overall range: 4 – 7

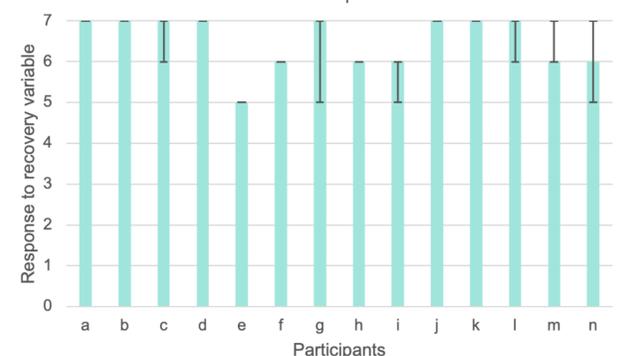


Figure 4 & 5: Graphs showing the median response from all the participants on each day to recovery measures. The 95% confidence intervals are shown.

The graphs show how the responses varied across the days and how variable responses were between days. The wider the confidence intervals the more variable the responses.

Figure 4: Participants responses to recovery measure A

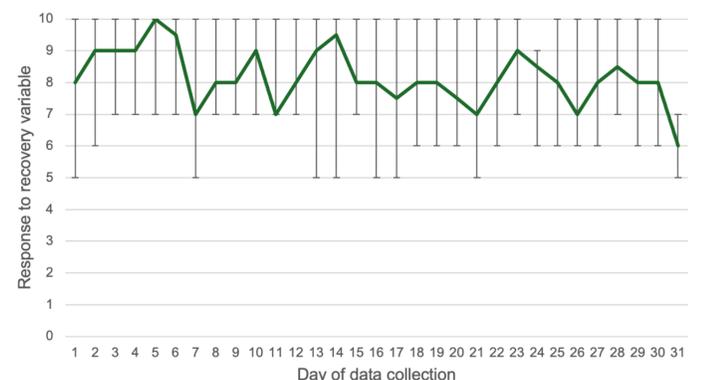
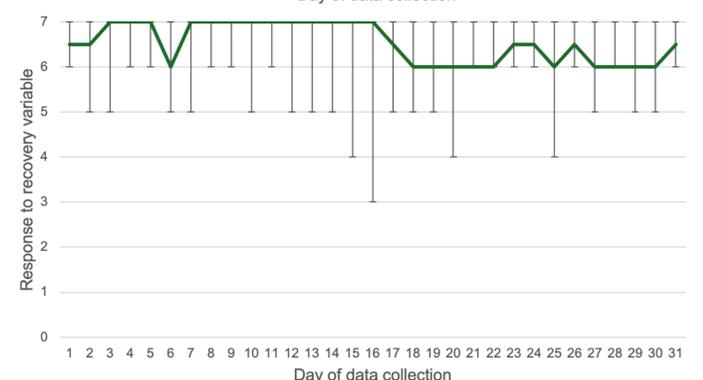


Figure 5: Participants responses to recovery measure D



DISCUSSION & CONCLUSIONS

- This protocol outlines a method for assessing the relationship between social networks and recovery.
- Preliminary data suggests **measures of 'community' varied very little.**
- Measures of progress, stress and craving were the most variable.**
- Measures must show variability to elicit the direction of network effect.
- Larger sample sizes are needed to use a SAOM and draw conclusions on direction of effect.
- Future studies should also further evaluate the psychometric properties of the measure of 'daily recovery status'.

1. Havassy BE, Wasserman DA, Hall SM. Social relationships and abstinence from cocaine in an American treatment sample. *Addict Abingdon Engl.* 1995; 90 (5): 699–710.
 2. Groshkova T, Best D, White W. The Assessment of Recovery Capital: properties and psychometrics of a measure of addiction recovery strengths. *Drug Alcohol Rev.* 2013; 32 (2): 187–94.