Relational influences on help-seeking for substance use and mental health among justice-involved people in Scotland: Protocol for a Social Network Analysis study

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Introduction and more information

This document sets out the protocol for the network study. The network study is the second of three work packages and should be seen in this context. WP1 is a scoping review, and WP3 will build on the results of this study by conducting stakeholder activities. It focuses on the pragmatic aspects of conducting the study. This was not uploaded apriori but only the analysis plan was completed later (see separate upload)

Aim

To identify how social networks influence help-seeking for substance use and mental health (SU/MH) among justice-involved people in Scotland.

Research questions

RQ1: Which individual characteristics, relationship qualities and network features are associated with help-seeking for SU/MH among justice-involved people in Scotland, and to what extent can variation in influence be attributed to individual, network, or community factors?

RQ2: How do social networks in context influence help-seeking for SU/MH use among justice-involved people in Scotland, and how is this experienced?

Overview

A mixed methods egocentric social network analysis (SNA) study with justice involved people in community settings in Scotland.

We will interview approximately 60 people with experience of justice-involvement in two demographically and geographically different areas of Scotland. We will use Network Canvas software to collect demographic data, psychometric measurements, an account of peoples' social networks, and qualitative data pertaining to help-seeking in the relational/community context in which the person lives.

Data will be analysed statistically to ascertain the variables associated with help-seeking attitudes and behaviour, and qualitatively to identify how help-seeking is experienced in the relational contexts in which people live.

For the purposes of this study, we are considering social networks as the people someone considers part of their network, including family and friends, colleagues and acquaintances, and support services – with a view to capturing 'strong' and 'weak' ties. We are explicitly looking to include people who may be very important but who would not encourage help-seeking or who may be perceived as engaged in antisocial activities.

Ethical approval

Ethical approval has been given by:

- University of Stirling General University Ethics Panel

- The Salvation Army
- Community Justice Scotland (CJS)

Neither local authority site has an independent ethical approval process. However, the research will be presented to relevant clinical and operational management boards by community justice managers in each area for full transparency and to secure support. If needing to expand our recruitment areas, we will select LA areas without further ethics processes for speed.

Lived Experience Advisory Panel (LEAP)

The LEAP will consist of approximately four people with experience of justice-involvement in Scotland. It will be established and chaired by a research team member with experience of imprisonment (JD). Where appropriate the LEAP will be attended by the PI, project artist (to be confirmed and appointed in discussion with the LEAP) and other research team members.

The LEAP will meet 3-4 times throughout the project of which this is a part, and at least twice throughout the network study.

At the first meeting they advised on how to approach and conduct interviews in a way that takes account of the potential trauma experienced by participants, interview content and the Network Canvas delivery. Their input resulted in revision of the psychometric measures to be more accessible to the population. At the second they will assist with interpretation of results and dissemination strategies.

Eligibility, sampling, and recruitment

Eligibility

1. Participants must be adults (18+) with current justice-involvement, or justice involvement in the last six months. Justice involvement will include:
    - community disposal
    - prison sentence
    - parole/on licence
    - voluntary throughcare

2. Participants must be resident in the community (i.e., not a custodial/secure setting) in one of the two LA areas.

3. Participants must be able to conduct the interview in English

4. Participants must not be an unmanageable risk to the researcher in the context of a one-to-one interview

If there are challenges recruiting sufficient participants, we will review our options to expand recruitment areas or to relax the recency of justice involvement (to up to three years).

Sampling

We will adopt purposive sampling followed by snowballing sampling, aiming to generate a sample of approximately 60 people (split equally between the two local authority areas)

Purposive: The primary consideration in the purposive sample is generating sufficient numbers of people who have or have not sought help.

Secondary considerations are obtaining a range in terms of age and gender. We anticipate that ethnicity will be insufficiently varied.

Snowball: Once we successfully recruit someone, we will ask them if they know other people who would be suitable to participate in the study, and to pass on the research team's contact details to those people. This is critical for getting people who are not positive about help-seeking / engaged with services in some way. We will link the participants identified via snowball sampling to the original participant who suggested them.

Recruitment

Approach

We will adopt multiple approaches to recruitment aiming to recruit a demographically diverse a sample including justice-involved adults who use and don't use services for support. We will write a project blog and include a link to this in all our study advertisement.

1) Targeted advertisements be disseminated by Community Justice Scotland, Criminal Justice Voluntary Sector Forum, The Salvation Army to services and networks in the target regions. These adverts can be further disseminated in service newsletters, paper format, on websites and email mailing lists (with a link to the project blog).
2) Personal networks of the research team, PAG and LEAP.
3) Researchers will offer to visit services to meet staff and service users, explain the study, and encourage the passing of information to service users.
4) E-newsletters of Drugs Research Network Scotland (DRNS), Scottish Centre for Crime and Justice Research (SCCJR), Scottish Alcohol Research Network (SARN), Scottish Inclusion Health Network.

We will review participant characteristics throughout the recruitment process to inform our purposive sampling approach and aim of maximising diversity in the sample and variation in our primary outcome (help-seeking). Depending on recruitment pace and diversity in participants, and in consultation with the LEAP, we will use the following strategies if needed:

5) Posters in community venues in recruitment areas, such as pubs, supermarkets, and local stores with study contact details / a QR code that links to a study blog – with guidance from the LEAP as to appropriate locations.
6) Social media advertisement (twitter) with a link to the project blog.

First contact

Potential participants identified by a service will first be approached by the service providers. If the potential participant gives permission, the service provider will inform the researcher of their willingness to be contacted and pass on their contact details.

Potential participants will also have the option to make direct contact themselves on viewing an advertisement.

When a participant identifies another person they know as a potential participant (snowball), the potential participant will be given the researchers contact details to make contact themselves.

On receiving interest from a potential participant, a researcher will contact them to discuss the study and go through the Participant Information Sheet (PIS). This can be by email or by telephone. We will be clear about who the researchers are, what is involved, how it may impact participants, and the limits to confidentiality.

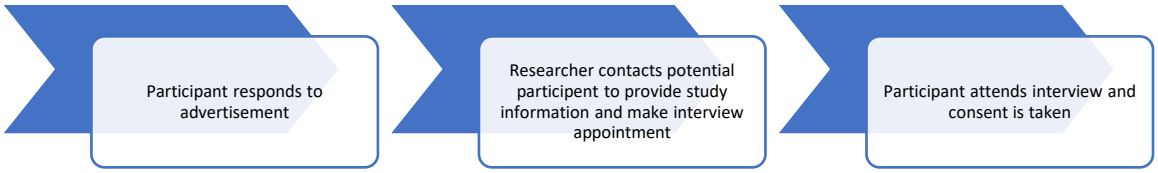
We will discuss anything that could make attending and participating more accessible, reflecting our intent to be trauma-informed an inclusive of people with different protected characteristics.

Researchers will mail/email the PIS and Consent Form if the participant wishes to take part.

They will confirm the times and location (online or in person) of the interview.

Informed consent

Consent forms will be built into the Network Canvas (data collection tool) interface. Key information will be reviewed, and consent indicated via a check box. This will be audio-recorded for extra assurances that consent is fully informed.



Data collection

Interviews will be held online or in an accessible community location, dependent on participant preference. They will be audio-recorded using MS Teams or portable recording devices. We will run two recording devices to protect against recording failure.

Interviews will involve collection of demographic data and psychometrics, followed by Network Canvas mapping of their social network. Discussion of experiences will be interspersed throughout but with a dedicated time at the end to capture any unaddressed areas and to focus more on community level factors. See separate file for the interview schedule

The interview format and questions in each section will be designed to address relevant content while remaining trauma-informed and inclusive, with input from the LEAP. We will pilot the format with members of the LEAP to establish the time needed, minimise participant burden, and determine the acceptability of questions/psychometric measures.

At the start

At the start of the interview, the researcher(s) will review the PIS and Consent Form and secure informed consent. They will explain how the interview will run, what to do if experiencing distress, and how participants can be supported. They will remind people of the limits of confidentiality (see protocol below for further detail) and, where someone is not an active service user, take the name of a trusted named contact with whom we could liaise if significant safety concerns arise (see Safety protocols).

Audio recording devices must be turned on.

Interview

Interview will consist of

- Demographic questions.
- Psychometric measures.
- Network interview - questions relating to ego and alters.
- Qualitative follow up questions.

The network interview will have three parts. Firstly, there is a name generator, which asked respondents to name up to five people they talk to about day-to-day things before asking five further questions to solicit further names of who is in their network. Then, a name interpreter is used to gain socio-demographic information and attitudes towards help-seeking. Finally, a name inter-relator asks respondents to report which of their named social contacts know each other (defined as potentially communicating with the respondent being presented).

A full interview protocol containing the questions, response options and interviewer script is prepared. See network canvas interview schedule.

At the end

Participants will be offered a £20 shop (e.g., Tesco, coop) voucher as a gesture of thanks.

They will be asked about any of their own contacts who may be willing to participate.

Participants will be issued a handout with details of support for justice-involvement, mental health, and substance use – so that this is immediately to hand on leaving, but can be looked at later when reflecting on participation. Wherever possible these will be tailored to the locality of the participant.

Managing data files from in-person interviews

- Network Canvas files and audio-recordings will be collected on non-university managed devices (due to issues with software operating when working offline). These devices will be encrypted.
- These files will be immediately transferred onto a University of Stirling managed laptop using an encrypted usb, and deleted from the non-university managed device.
- Data will only be transported on non-managed devices if there is technological failure or in an emergency, in which case they will be transported by a researcher to a locked secure location until such time as they can be transferred securely to a university managed device.
- As soon as reliable internet connectivity can be obtained, the files will be uploaded to the project secure drive, and deleted from hard drive and usb drive storage.

Data analysis

Quantitative

Quantitative analysis will address RQ1: *Which individual characteristics, relationship qualities and network features are associated with help-seeking for SU/MH among justice-involved people in*

Scotland, and to what extent can variation in influence be attributed to individual, network, or community factors?

We are not pre-specifying every detail in advance, allowing us flexibility to explore different (and emerging) approaches as familiarity with the field increases, and as new methods are developed. It will include the following components:

1. Descriptive statistics to describe the sample and network characteristics

We will calculate summary statistics for the participants (egos) characteristics and the characteristics pf people within their social network (alters). Network features will be considered ego characteristics. Table 1 shows variables that will be summarised and available for analyses,

Table 1. Data available for quantitative analysis

Ego characteristics	Alter characteristics	Network features	Community features
• Age • Gender • Ethnicity • Postcode (for deprivation and rurality) • Ever had MH/SU condition • Current MH/SU condition • Ever accessed support • Currently accessing support • Current justice involvement • Past justice involvement • Attitudes to help-seeking • Perceived stigma MH • Perceived stigma SU	• Age • Gender • Ethnicity • Role/nature of relationship (e.g., family, friend) • Ever had MH/SU condition or justice involvement • Current MH/SU condition or justice involvement • Attitudes to help-seeking • Closeness • Respected-ness	**Compositional** • Size (number of alters) • Proportion made up of different roles (family, friend, professional, online/in person) • Proportion of genders, ethnicities, ages • Proportion perceived as supportive of help-seeking for SU/MH **Structural** • Homophily (e.g. by gender, SU/MH problems, attitudes) • Cliques • Components (number of) – including within component homophily (e.g. by attitudes)	• Deprivation indices • Rurality indices (determined from respondent postcode)

2. Investigate factors associated with help-seeking.

a) Ego-level approach

We will assess the proportions of our sample who have sought help, from different types of providers. We will then determine an appropriate separation of the sample into help-seekers and

non-help-seekers. We will seek LEAP/theoretical and pragmatic input here. We want a statistically robust decision but also categories that make real world sense. An issue to consider is that people are seeking help from different places. There may be fundamental differences in the influences on help-seeking depending on what type of help is being referred to (statutory, medical, peer, charity).

If we fail to get variation in the help-seeking variable, we will revise our analyses focused on attitudes to help-seeking. See revised analysis plan dated August 2024.

We will use Chi-squared and t-tests to identify significant differences between the groups on the ego characteristics in table 1 (above). We will then provide tables of means based on the network and community features in table 1. Given the estimated sample size of 60 it will not be possible to meaningfully perform multi-variate analyses of this group. However, summary statistics by those measures will be provided. The summaries for the whole group will be broken down later as part of the formation of the network typography (described below).

b) Multi-level approach

We will undertake analysis to understand the perceptions of justice involved people of the levels of support for help-seeking among their peers. A multi-level regression will be undertaken. Each alter will be regarded as a case in this dataset. The respondent's perception of their attitude towards help-seeking will be treated as the outcome variable, with explanatory variables looking at age, gender, ethnicity, nature of relationship and (perceived) mental health and substance use issues. Cases will be grouped by the respondent who nominated them, in a multi-level modelling framework. Separate analyses will be conducted for substance use and mental health.

These analyses will aid our understanding of who our population are likely to see as supportive, or unsupportive, of help-seeking. The sample size for this analysis will be the number of alters (people nominated in the network interview), rather than the number of participants, so we would anticipate sufficient number of cases for this analysis (around 300 respondents if people nominate 5 peers on average, or around 600 if they nominate an average of 10 people).

3. Investigate the relative contribution of individual, network and community factors to help-seeking

We will present quantitative descriptive data and summary variables. The relative contribution of different factors, and whether the network/individual factors operate differently in different contexts will be explored qualitatively to complement the ego-level and multi-level modelling.

Network typologies

Creating typologies

From the name inter-relator and name interpreter in the network interview we will produce a unique social network for each participant, represented by a sociogram (network visualisation). To produce typologies, we will identify similarities and differences in sociograms by examining structural and compositional network features, informed by qualitative and quantitative data.

- Visually inspect the sociograms for evident similarities/differences
- Select theoretically relevant variables to inform typology formation
- Cluster analysis to identify groups statistically using identified variables

- Sense check outcomes
- Review algorithm identified typologies against qualitative data to explain the clusters and triangulate findings.

It is anticipated that we will break the networks down into 3-5 types, each of which has a broad level of consistency within the group, with substantive differences between those groups. The types will be created by looking at the structural properties of the network, but also the type of relationship between the respondent and ego (i.e., family, friends, professional services etc.)

Relationship between typologies and help-seeking

Typologies are useful for bringing together qualitative and quantitative findings. We will report the summary statistics from the quantitative survey for each type produced. The network features will likely influence the selection into types. The characteristics of the ego and alter, as well as community features, will be analysed to understand more of both why people are likely to have formed that type of network and what is associated with that type in terms of help-seeking and support.

Qualitative

Analysis will utilise Framework Analysis and primarily focus on answering RQ2: *How do social networks in context influence help-seeking for SU/MH use among justice-involved people in Scotland, and how is this experienced?*

Audio recordings will be securely transferred to TP Transcription for verbatim transcription. On return, transcripts will be checked by researchers for accuracy against audio recordings. Once confirmed as accurate, audio files will be deleted. Transcripts will be imported into NVivo (QSR) for analysis.

A preliminary coding scheme will be developed, informed by literature (WP1) and in discussion with the PAG/LEAP. This will be revised inductively during analysis as familiarisation with transcripts develops, allowing us the flexibility to add, remove and amend themes as understanding and insight deepens.

It will include themes around contexts in which social networks are situated, *how* these influence and relate to help-seeking; and how they are experienced by participants.

We will create a matrix where rows=participants, and columns=themes from coding scheme. Data within transcripts will be summarised by adding extracts (verbatim quotations) into the corresponding cell(s) within the matrix (see Table 1).

Table 1: Example coding scheme

	Theme	Theme	Theme	Theme	Theme	Theme
Pseudonym/ID1	“extract”	“extract”	“extract”		“extract”	“extract”
Pseudonym/ID1	“extract”	“extract”		“extract”	“extract”	

Organised data extracts, summaries and transcripts will facilitate interpretive analysis of the data: identifying the mechanisms by which (how) social networks in local contexts influence help-seeking, and how social networks in context are experienced as influencing help-seeking by participants.

Maintaining each participant as a row allow us to identify where themes are discussed differently or with different frequencies between participants with different demographic characteristics (e.g., age, gender, local area).

To inform the quantitative analysis, we will also attend to where participants discuss individual and network factors relevant to their help-seeking.

Safety protocols

Confidentiality breach protocol

Participants will be fully informed if the limits to confidentiality through discussion of the PIS at the start of interviews. These include: for participants who are referred by a worker and the interview is held on service premises, their participation may be known by the service they access, but the content of the interview will remain confidential; confidentiality is within the research team, i.e., the interviewer but also other researchers will see the content; and that there are incidences where content confidentiality may be breached if there are concerns of risk of serious harm. A summary of what will happen if a breach is deemed necessary will be made clear.

Breach incidence: welfare concerns

The content of participants' interviews is confidential *within the research team* except where the participant discloses intent to cause significant harm to themselves or a specified other, or knowledge of another person who has intent case significant harm to themselves or others. Significant harm includes but is not limited to: self-harm, suicidal intention, use of weapons, sexual or physical violence, safeguarding concerns for children, terrorism etc. The research team will be required to make a nuanced judgement as to whether the individual has *intent* and whether the level of harm is *significant*. There are no explicit rules for quantifying this and where necessary we will seek additional advice whilst maintaining confidentiality.

Where a researcher has a concern for the welfare of a participant or others they should:

1. If confident to do so, explain to the participant that they have a concern. The researcher is under no pressure to do this and can skip straight to (4).
2. Encourage the person (if appropriate) to approach relevant support themselves.
3. Explain that they have to raise it with the PI.
4. The researcher (if not the PI) will alert the PI immediately, and a meeting to discuss concerns will be held the same day, or at the earliest opportunity thereafter.
5. If a confidentiality breach is deemed required, the PI will determine the appropriate course of action , in discussion with others where advice is required.
6. This course of action will be taken and the confidentiality breach and course of action documented as an 'adverse event' in the adverse event log.

Potential causes of action: Where a confidentiality breach is indicated in the service of peoples' welfare, potential contacts that the research team alert will depend on the person and the nature of the concern. This may mean informing a named service worker, a named trusted contact (identified at the start of the interview), or in extreme cases emergency services.

Breach incidence: criminal investigations

Data is not legally privileged. Although highly unlikely, where data is required by the police, we are required to supply this where relevant to their inquiries. Participants will be reminded not to

disclose current or undetected criminal activity and interrupted if they appear to be doing so. They will be encouraged throughout the interview to give their named contacts a pseudonym.

Adverse events protocol

Adverse events include but are not limited to:

- Disclosure warranting a confidentiality breach
- Harm during the course of an interview
- Harm potentially or definitely attributable to participation in the study to participants
- Incidences where the researchers experience harm
- Data breaches

These should be reported as soon as possible to the PI, actions identified and taken. and the adverse event log completed.

Researcher safety protocol - See risk assessment.

Physical safety

All interviews conducted in a private but observable space, e.g., a room within the service they access / a room at a partner organisation.

Interviewers will make someone else on the premises aware of their location and of the likely time that the interview should be concluded. They will make this person aware the interview is complete and that they are leaving.

We will operate a 'buddy system' within the research team. Prior to an interview, the interviewer will inform their buddy (another member of the research team) as to their location, the phone contact for that location, expected time of interview completion and an emergency next of kin contact. Following the interview, they will notify the buddy that they interview is concluded. Should an end of interview response not be obtained within one hour of the expected time, the buddy will attempt to contact the interviewer, and failing that the service to ascertain their whereabouts. If they cannot be located by 4pm or the end of the working day (5pm) where interviews are later, the buddy will alert a senior colleague at the university to discuss the next steps.

Where there are adverse weather conditions, researchers will be supported in their decisions not to travel.

Emotional safety

Interviewers will be exposed to potentially emotive content in discussing substance use, mental health and justice-involvement. This is a population with high levels of trauma, which may be disclosed, particularly in the context of discussing social networks.

Research Assistant interviewers will have regular individual debriefing with the PI who is an experienced clinical supervisor in justice health contexts. Interviewers will be encouraged to schedule time to reflect on the impact of the work on themselves, schedule time to do activities that support their own wellbeing and emotional stability, and wherever possible to allow sufficient time between interviews to check in on themselves.

PI will apply the above strategies and have support from grant mentors.

University services will be repeatedly highlighted to research team members.

Data protection protocol - See DPIA, Privacy Notice and DMP