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Applying social capital theory and social network analysis to understand help-seeking for mental ill-health and substance use problems among people experiencing social marginalisation: A scoping review

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Applying social capital theory and social network analysis to understand help-seeking for mental ill-health and substance use problems among people experiencing social marginalisation: A scoping review

Abstract

Background: People experiencing social marginalisation are at increased risk of mental ill-health and substance use problems, and face barriers to accessing support. Help-seeking is a crucial element in accessing support, and largely influenced by social relationships. Social capital theories provide perspectives for understanding these relational influences, which can be measured through social network analysis. This paper focuses on relational influences on help-seeking among socially marginalised groups.

Objective: We conducted a scoping review to establish how social capital theory and social network analysis have been applied to understand the relational influences on help-seeking for mental ill-health and substance use problems among people experiencing social marginalisation.

Method: We searched four multidisciplinary databases (EMBASE, Web of Science, Criminal Justice Abstracts, Soc Index) for papers reporting help-seeking among adults experiencing social marginalisation and which applied social capital theory or social network analysis. We charted data and conducted a narrative results synthesis.

Results: Of 30 papers included in the review, six were focused explicitly on help-seeking, of which five applied quantitative social network analysis, one was framed by network theories of social

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capital, and one mentioned social capital theory in interpreting findings. The remaining papers discussed help-seeking incidentally whilst focusing on different phenomena. Fear of losing social capital, interconnected with the tight-knit bonds within marginalised groups could deter help-seeking. Knowledge and attitudes towards help and help-seeking shaped by past experiences and network cultures influenced help-seeking and contributed to a cautious and selective approach among people experiencing social marginalisation.

Conclusion: Greater theoretical elaboration and empirical research is required to better appreciate the contribution of social capital to help-seeking for mental ill-health and substance use problems among people experiencing social marginalisation. Social network analysis has been successfully utilised to examine relational influences on help seeking, although its use is currently under-utilised.

Keywords

Mental ill-health; substance use; help-seeking; social capital; social network analysis

Strengths and limitations of this study

- First review focused on help-seeking for mental ill-health and substance use problems among people experiencing social marginalisation.
- Identified important ways in which social relationships in context encourage or deter help-seeking with implications for intervention planning
- Papers may have been overlooked due to variation in terminology and concepts used related to help-seeking

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- Studies adopting other social theories were not included unless they utilised social network analysis

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Introduction

Access to healthcare

Given the high levels of mental ill-health and substance use problems among socially marginalised groups, access to appropriate support and treatment is essential (Fazel et al., 2008; Fazel & Seewald, 2012). Whilst evidence-based treatments for mental ill-health (MH) and substance use problems (SU) are available, these are not accessed equitably across populations (Saxena et al., 2007), suggesting that certain groups experience greater barriers to access. When MH/SU are not addressed with effective treatment and support, there is an increased risk a person will reach a point of crisis that brings them to the attention of emergency health and other services. Socially marginalised populations, for example those experiencing homelessness or with justice-involvement in their lives, are disproportionately represented in attendances at emergency services (Frank et al., 2014; Vohra et al., 2022). MH/SU is the primary reason for attendance among these groups and a driver of frequent attendance (Butler et al., 2020; Vohra et al., 2022). This high use of emergency and crisis care indicates that people experiencing social marginalisation may face barriers to accessing early and preventative MH/SU services.

Accessing healthcare depends on interrelated demand and supply elements, spanning systemic, social, cultural, and personal factors. Levesque et al. (2013) describe five distinct but interrelated components that affect access: identifying healthcare needs; seeking healthcare services; reaching healthcare services; using services; and being offered appropriate services. Barriers and facilitators (which may be personal, social, cultural, structural, or organisational) act on different components to affect access, and their impact will differ between people with different characteristics, in different relational and community contexts, and when accessing different types of healthcare. For example, among people experiencing justice-involvement, barriers to service access include being unable to register with a general practitioner, stigma within society and services, cost (where health and social

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care is not funded by general taxation), service fragmentation and frequent change in providers, service designs that do not account for multi-morbidity, and waiting lists (Begun et al., 2016; Bramley et al., 2019; Canavan et al., 2012; Revolving Doors Agency, 2017).

Help-seeking

Help-seeking involves responding perceived needs by actively seeking assistance, support, or guidance from various sources, including informal networks, community resources, and professional services. Unlike accessing or using services, which involve receiving assistance or treatment, help-seeking encompasses the steps individuals take to identify and reach out for support, regardless of whether they ultimately engage with services. This requires the desire to seek help and the ability to do so (Levesque et al., 2013). There may be specific dynamics related to help-seeking for MH/SU compared to help-seeking in general, as the former carry high levels of social stigma. Within MH/SU are differences in stigma depending on the nature and severity of someone's presentation (e.g. some mental health conditions are less stigmatised than others, and there are different attitudes and legal approaches towards illicit drugs and alcohol). Additionally, the help-seeking processes may operate differently among people who experience social marginalisation, and by the type of marginalisation experienced.

Research into help-seeking for MH/SU often uses healthcare utilisation rates as a measure of help-seeking, which does not distinguish between the act of seeking help, and successfully accessing treatment. For example, in studies of homeless adults, authors state they are investigating help-seeking for MH/SU, but measures are of health care utilisation (Chondraki et al., 2014; Taylor et al., 2022). Further exploration is needed into help-seeking among people who experience social inequities, that goes beyond age, gender and ethnicity, (Lowther-Payne et al., 2023).

In this paper we focus on social marginalisation resulting from homelessness, justice involvement, substance use problems and mental ill-health because these are often experienced together and are

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core forms of severe and multiple disadvantage (Bramley et al., 2015, 2019). For homeless women, help-seeking is impacted by lack of knowledge of what services are available and how to seek them, compounded by competing priorities (such as accommodation loss). Homeless women may hide difficulties from authorities who have powers to intervene with their children, and experience exhaustion from navigating the system, leading to giving up (Rizzo et al., 2022). Research into help-seeking among justice-involved people largely attends to the experiences of people in custody, where people can be deterred from help-seeking for MH/SU due to a perceived need to project strength, control, and autonomy, in order to retain their status and related safety (Ramesh et al., 2023). Among those in prison, negative past experiences can lead to mistrust, a perception help is useless, and fear of further negative experiences (Byrne et al., 2024; Ramesh et al., 2023). Prison is a distinct relational environment that calls for the enactment of particular social identities to secure status, safety and self-concept, which can deter help-seeking (Byrne et al., 2024). Whether these themes would be as apparent in people released to the community or serving a community-based sanction is unclear.

Desire and ability to seek help involves personal and relational influences, including the attitudes, beliefs, knowledge, norms, and resources in communities and social networks. Existing theoretical models, such as the Theory of Planned Behaviour, point to the relevance of these relational aspects when applied to help-seeking (Adams et al., 2022; Ajzen, 1991), but they remain under-explored, particularly considering the range of relationships people have, and their embeddedness within communities with different cultures and social representations of help-seeking (Levesque et al., 2013). Further there has been limited application of social theory to explain the relational mechanisms behind help-seeking (Byrne et al., 2024; Pescosolido, 1991, 1992), impacting our ability to understand how and why help-seeking takes the forms it does in different populations.

A more nuanced examination of the relational influences on help-seeking for MH/SU for people experiencing social marginalisation is essential given the disproportionate prevalence of mental ill-

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health and substance use problems in these populations. Better understanding the relational influences of help-seeking for MH/SU provides an opportunity to intervene to achieve individual and collective behaviour change, by targeting not only individuals, but social networks in communities.

Social capital

Social capital is understood as the resources (e.g., information, emotional and tangible support) available to an individual through their relationships. It explains how the structure and nature of relationships, at a micro, meso, and macro level, enable or constrain behaviour through access to resources and information, and the sharing of beliefs, attitudes, and cultural norms (Bourdieu, 1986; Coleman, 1988; Lin, 1999; Putnam, 2000). Social capital has been further elaborated to consist of bonding, bridging, and linking capital. Bonding capital refers to the social capital obtained through relationships within a group, whereas bridging refers to that obtained from relationships between groups (Gittell & Vidal, 1998; Putnam, 2000). Linking capital is conceptualised as social capital obtained from relationships across different levels of a social hierarchy, such as between citizens and institutional providers of services (Woolcock, 2000). Social capital theory therefore provides a means to theorise the relational influences upon help-seeking for MH/SU occurring within social networks embedded in communities.

Evidence indicates a positive relationship between social capital and health, although different groups do not always benefit or benefit equally (Ehsan et al., 2019). Social capital can have positive or negative implications for a range of outcomes including health (Portes, 1998; Villalonga-Olives & Kawachi, 2017). There is a need for greater empirical examination of the mechanisms by which social capital has its effects, and how this may differ among different groups (Ehsan 2019). To maintain good health, the influence of social capital on accessing help at a time of illness, through either

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encouraging or deterring help-seeking, is one potential mechanism that could contribute to better health outcomes and prevent a later need for emergency care.

Social network analysis

Social network analysis (SNA) takes an approach to research in which networks are a central concept of interest (Borgatti et al., 2009). SNA is well suited to examining social capital at the 'meso' level, i.e., at the level of networks within communities (with micro representing study of the individual, such as their characteristics, and macro representing wider societal structures, such as law or policy). It presents a means to elucidate the mechanisms by which social capital may affect different outcomes. SNA includes a range of methods to study structure, composition and dynamics of social networks in their situated context (Scott, 2010). Of the two primary applications of SNA, the first involves analysing personal networks of individuals (egocentric networks or 'egonets') by collecting quantitative and/or qualitative data about a person (ego), others to whom they relate (alters), and how alters relate to one another. The second usually involves analysing quantitative data on a whole network (sociocentric networks) of all people within a bounded community, such as a school, and identifying the connections between them. In both cases ego and alter characteristics can be collected, and the nature of relationships ascribed different attributes (e.g. supportiveness or conflict levels). Analyses can be descriptive, involve identifying patterns in behaviour, or modelling to predict outcomes. SNA has utility for gathering and analysing data to empirically examine the relational influences on help-seeking for MH/SU and the mechanisms by which these operate.

Rationale

There is limited literature that examines help-seeking as a component of access to MH/SU care, particularly among people experiencing social marginalisation. Better understanding this phenomenon is essential to inform tailored approaches that enable those experiencing stark health

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inequities to seek, and ultimately access, help for highly stigmatised health needs. Social capital theorises how and why relationships in social context influence behaviour, indicating its potential utility for understanding influences help-seeking that goes beyond individual or structural considerations. The growing application of SNA in health research, and its suitability for operationalising and empirically examining social capital concepts, suggests SNA research may highlight key considerations for understanding help-seeking for MH/SU among people experiencing social marginalisation.

The broad academic and practice fields in which social capital and SNA are applied indicates a need for a multidisciplinary synthesis to minimise fragmentation in the evidence base. Using a scoping review, we aimed to clarify current knowledge about: the utility of social capital theory to explain help-seeking for MH/SU in people experiencing social marginalisation; and how SNA has been applied in the study of relational influences of help-seeking for MH/SU with people experiencing social marginalisation.

Objective

To synthesise the literature on social capital theory and SNA as applied to help-seeking for MH/SU among people experiencing social marginalisation.

Questions

1. How have theories of social capital been applied to help-seeking for MH/SU among people experiencing social marginalisation?

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2. What insights have been gained through applying SNA to understand help-seeking for MH/SU among people experiencing social marginalisation?

Protocol and registration

We pre-published our protocol on OSF (www.osf.io/nfkmq).

Methods

We followed established scoping review methods (Arksey & O'Malley, 2005; Levac et al., 2010) and report this using the PRISMA Scoping Review Extension (Tricco et al., 2018).

PPI statement

This review is part of a larger study informed by a Patient and Public Involvement Group consisting of people with experience of the justice system. They will advise on dissemination of review findings.

Eligibility criteria

We included papers where the population were adults (18+ years) experiencing social marginalisation due to involvement in the criminal justice system (justice-involvement), homelessness, mental ill-health, using drugs, problem drinking or gambling. Eligible papers referred to help-seeking from any source for mental ill-health or substance use problems, and applied either

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social capital theory or social network analysis. We did not limit context or date, but restricted language to English and our search to peer-reviewed sources.

Information sources

We searched four databases to identify literature across health, social science, criminology, and criminal justice: Criminal Justice Abstracts, EMBASE, SocINDEX, Web of Science All Databases.

Search strategy

Initial searches for SNA or social capital theory *and* mental health or substance use in Web of Science produced a manageable number of publications for review. We thus proceeded in our full search without using search terms for help-seeking or social marginalisation, allowing us to take a nuanced approach to inclusion that accounted for variation in definitions and terminology. The review team considered papers carefully for whether the phenomena reported could be interpreted as help-seeking for MH/SU. We determined this to be where a person approached another/others to discuss or disclose MH/SU concerns; where someone sought advice, support or help related to their MH/SU. We also attempted to capture the inverse, where people were 'not help-seeking' by disengaging from or avoiding treatment and support. As a scoping review, we did not include an exhaustive list of terms for MH/SU, but selected terms in conversation with a subject librarian that would provide broad coverage.

In each database, we combined search terms for key concepts using Boolean operators. We searched title, abstract, keyword, and where available, subject headings/indexing. In Web of Science we searched by 'Topic' (title, abstract and keywords). Table 1 shows the template search strategy, with the full search strategies included in the Supplementary File.

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We set up email alerts in Web of Science (which indexed all the included papers and had the largest number of results) to identify new publications as the review progressed, reviewed the reference lists of included papers, and met regularly to determine if additional searches were needed, although this was ultimately not required.

Table 1. Template search strategy

Questions	Key concepts	Key search terms
How have theories of social capital been applied to help-seeking for MH/SU among socially marginalised groups?	Social capital theory Social network analysis Mental health Substance use Help-seeking Socially marginalised groups	"Social capital" OR "social network analysis" AND "mental health" or "mental illness" or "psychosis" or "schizophrenia" or "depression" or "anxiety" or "personality disorder" or "eating disorder" or "post traumatic stress disorder" or "suicide" or "suicidal" OR "Substance use" or "substance abuse" or "substance misuse" or "addiction" or "drug dependence" or "alcohol dependence"
What insights have been gained through applying SNA to understand help-seeking for MH/SU in socially marginalised groups?		

Selection of sources of evidence

XX conducted the searches on 26-27th June 2023, imported results into reference management software (Endnote, 2020) to remove duplicates, and imported de-duplicated results into Rayyan (Ouzzani et al., 2016) to facilitate team review.

In an initial calibration process, three reviewers (XX, XX, XX) independently screened the same 10% of citations at title and abstract level and discussed results to agree a consistent approach. Following this, the three reviewers screened all papers at title and abstract level with at least two reviewers screening each record. We met at the mid- and endpoint of title and abstract screening to discuss

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inclusions, exclusions, and any areas for additional searches. Disagreements were resolved in three-way discussion, producing a list of papers relevant for full text review.

The three reviewers independently read 10% of papers at full text to determine eligibility for inclusion as an initial calibration process. Following this, all papers were independently screened by at least two reviewers. We again met at the mid- and endpoint to discuss decisions and resolve any conflicts.

We intended this stage to be iterative (Levac et al., 2010), but did not identify a need for further searches. We checked all references lists of included papers and relevant papers that were outside our scope.

Data charting process

Three reviewers (XX, XX, XX) piloted a data charting template (data items section) before meeting to review the consistency in content and detail of the extracted data. Minor amendments were made to clarify where focus on help-seeking and use of social capital were explicit or incidental, add extraction of sample size and study aim(s), and to streamline recording of results. Reviewers divided the remaining papers for data charting, with XX checking all extracts. It was not necessary to contact authors for further details.

Data items

For each paper we recorded the data detailed in Table 2.

Table 2. Data items extracted

All papers	• Year published • Year data collected • Location and country • Population • Sample size

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	• Socio-demographic characteristics (age, sex/gender, ethnicity, other) • Aim and extent of health-seeking (implicit or explicit)
Social capital papers	• Extent of focus on social capital (explicit or incidental) • Level of social capital discussed (micro, meso, macro) • Types of social capital explored (focusing on bonding, bridging and linking) • Theoretical orientation of the paper • Summary of any theoretical argument relating social capital to help-seeking • Results relevant to help-seeking
SNA papers	• Type of method (quantitative, qualitative, mixed methods) Social network type (egocentric network/personal network, whole network) • Network features studied (e.g. centrality, homophily) • Data collection and analysis methods, • Findings related to help-seeking or the utility of SNA

Critical appraisal

We anticipated we may find more theoretical papers discussing social capital and because of our methodological focus on SNA, we elected to appraise the quality only of empirical SNA papers. As there are no validated critical appraisal tools for SNA, at least one reviewer appraised the quality of each paper using the Mixed Methods Appraisal Tool (MMAT), selected for its ability to support efficient appraisal of various study types (Hong et al., 2018). We were cognisant of potential limitations in elucidating methodological strengths and limitations of SNA designs and in this respect were testing the utility of MMAT for SNA.

Method of synthesis of results

We synthesised the results using data summaries and visualisations, before developing a narrative synthesis addressing each question. For papers discussing social capital we summarised these according to the number and type of papers, publication dates and rate, and grouping by sample demographics, country, population, focus on mental health or substance use (or both), theorists and

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types of social capital. For SNA papers, we summarised by the number and type of study, sample demographics, country, population, focus on mental health or substance use (or both), and methods applied. These were discussed as a wider team at the midpoint to capture impressions and inform the final synthesis and reporting.

Results

Selection of sources of evidence

We identified and screened 4487 papers at title and abstract level, and reviewed 122 at full text. We included 30 papers. Twenty-eight were identified in database searches, one from citation searching, and one from wider reading. The latter two had not used 'social network analysis' as a term in full thus not being identified in initial searches (see Figure 1). Six were explicitly focused on help-seeking. Five of these used quantitative social network analysis, with one of five implicitly framed used social capital. The sixth made a short reference to social capital in a qualitative study. The remainder made incidental references to help-seeking within studies of other phenomena.

Figure 1. PRISMA flow diagram

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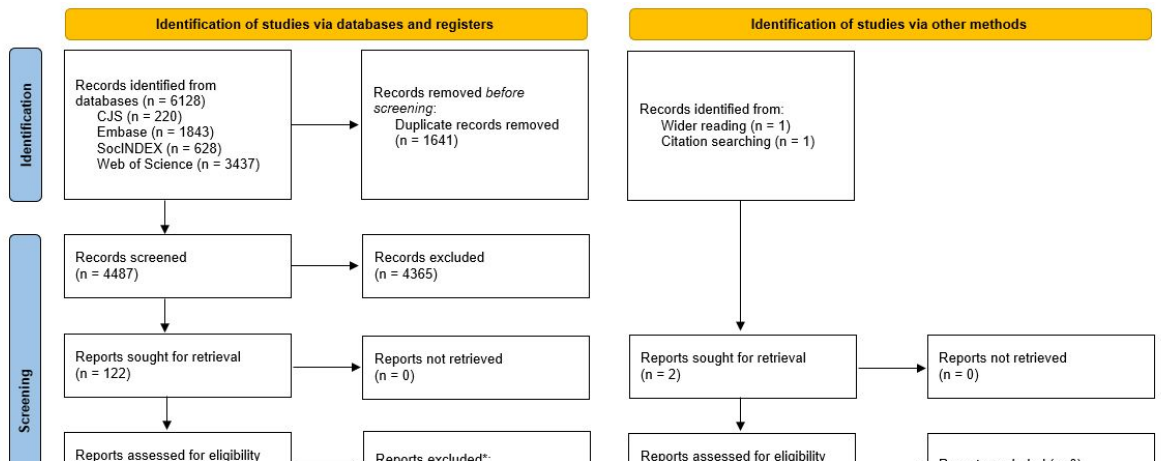

*Some papers excluded for multiple reasons; most frequent co-occurrence was wrong concept (not discussing help-seeking / engaging with social capital or social network analysis) and wrong population (wrong age range or not one of the specified socially marginalised populations). Only papers that had *only* the wrong population (i.e., were about help-seeking for SU/MH with social capital/social network analysis but were not with one of our focus populations) are included in 'wrong population'.

Characteristics of sources of evidence

The characteristics of papers focused on help-seeking are presented in Table 3. The full extraction is presented in Tables S1 and S2 in the Supplementary File and summarised here.

Publication date: The first paper was published in 2001 (Granfield & Cloud, 2001), and the most recent in 2023 (Amadei et al., 2023; Ondrasek et al., 2023). There has been a gradual increase in papers published that discuss relational elements of help-seeking for MH/SU (see Figure 2), although the vast majority only make incidental references to this. Fourteen studies reported the dates data were collected, ranging from 1990 to 2020 (Amadei et al., 2023; Boeri et al., 2016; Cheney et al., 2016; Fulginiti et al., 2022; Garcia et al., 2022; Granfield & Cloud, 2001; Ondrasek et al., 2023; Palombi et al., 2022; Perry & Pescosolido, 2015; Silva et al., 2021; Smith et al., 2023; Takahashi et al., 2009; Wiencke, 2022; Woodall & Boeri, 2014).

Figure 2: Numbers of papers published per year

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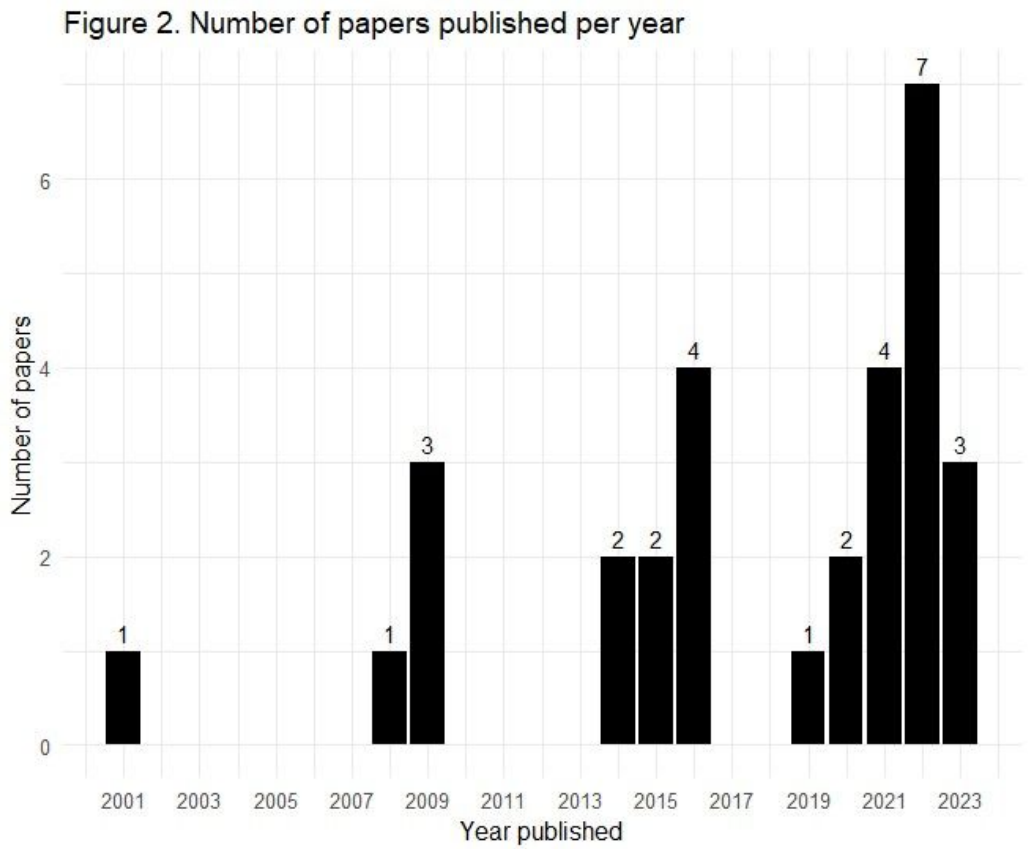

Country: High and upper-middle income countries are represented (see Figure 3). Two studies were literature reviews, thus including multiple countries (Brookfield et al., 2019; Timmer et al., 2022), two were conducted online and therefore could include participants from multiple countries (Garcia et al., 2022; Wester et al., 2015) and one did not report the country where data were collected (Fulginiti et al., 2016). Of the remaining 25 studies, seven were conducted in the USA (Boeri et al., 2016; Cheney et al., 2016; Fulginiti et al., 2022; Granfield & Cloud, 2001; Palombi et al., 2022; Perry & Pescosolido, 2015; Woodall & Boeri, 2014) and five in the UK (Anderson et al., 2021; Brown & Baker, 2020; Radcliffe & Stevens, 2008; Raymond, 2009; Smith et al., 2023). Two were conducted in Brazil (Amadei et al., 2023; Silva et al., 2021) and Canada (Kirst, 2009; Oliver & Cheff, 2014), and one study was identified from each of Israel (Itzhaki-Braun & Gavriel-Fried, 2022), South Africa (Myers et al., 2016), Czech Republic (Ondrasek et al., 2023), Belgium (Pouille et al., 2021), New Zealand (Rijnink

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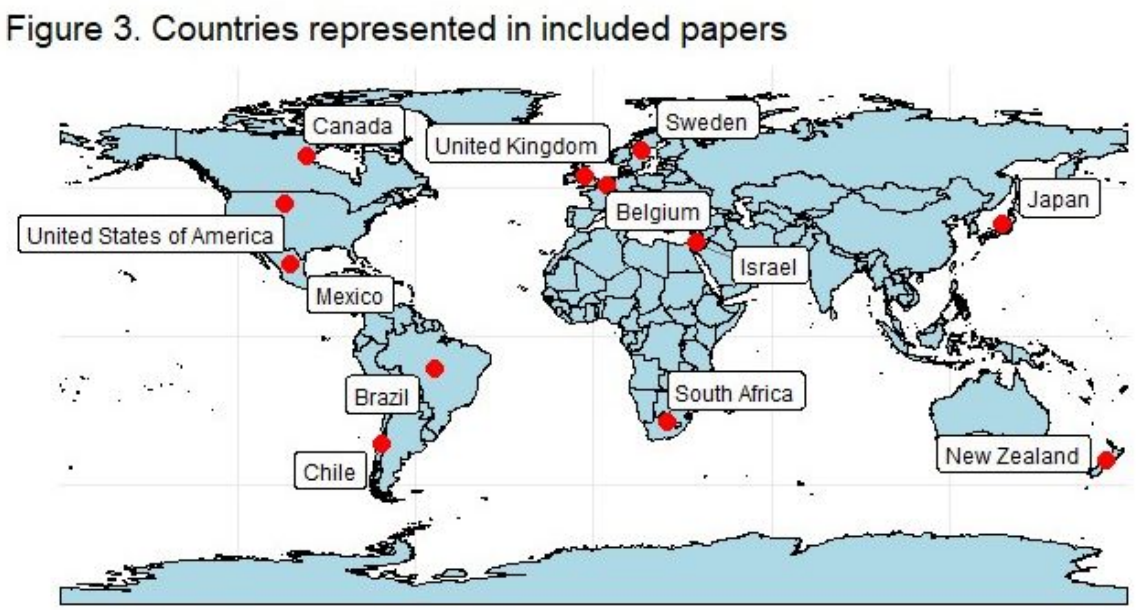
et al., 2022), Sweden (Skogens & von Greiff, 2020), Japan (Takahashi et al., 2009), Mexico (Urada et al., 2021) and Chile (Wiencke, 2022).

Figure 3. Countries represented in included studies



Sample size: Sample size varied by study design from seven in the smallest qualitative study (Smith et al., 2023) to 4211 in a whole network study that took data from internet posts (Garcia et al., 2022).

Demographics: With the exception of the literature reviews (Brookfield et al., 2019; Timmer et al., 2022), most studies reported age, gender, and ethnicity of their primary participants. Seven studies had a clear majority (over 60%) of men (Amadei et al., 2023; Anderson et al., 2021; Granfield & Cloud, 2001; Itzhaki-Braun & Gavriel-Fried, 2022; Pouille et al., 2021; Radcliffe & Stevens, 2008; Smith et al., 2023), nine had a clear majority of women (Myers et al., 2016; Oliver & Cheff, 2014; Perry & Pescosolido, 2015; Raymond, 2009; Silva et al., 2021; Skogens & von Greiff, 2020; Urada et al., 2021; Wester et al., 2015; Woodall & Boeri, 2014), eight were relatively equally split (Boeri et al., 2016; Brown & Baker, 2020; Cheney et al., 2016; Fulginiti et al., 2016, 2022; Kirst, 2009; Rijnink et al.,

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2022; Takahashi et al., 2009) and four did not report sex/gender of the sample (Garcia et al., 2022; Ondrasek et al., 2023; Palombi et al., 2022; Wiencke, 2022).

People aged 16 to 72 are represented. Five papers did not report the age of participants (Garcia et al., 2022; Ondrasek et al., 2023; Palombi et al., 2022; Urada et al., 2021; Wiencke, 2022).

Seventeen papers reported ethnicity, allowing readers to assess the representativeness of the sample in relation to the country studied (Amadei et al., 2023; Boeri et al., 2016; Cheney et al., 2016; Fulginiti et al., 2016, 2022; Granfield & Cloud, 2001; Itzhaki-Braun & Gavriel-Fried, 2022; Myers et al., 2016; Oliver & Cheff, 2014; Ondrasek et al., 2023; Palombi et al., 2022; Perry & Pescosolido, 2015; Radcliffe & Stevens, 2008; Raymond, 2009; Silva et al., 2021; Wester et al., 2015; Woodall & Boeri, 2014). There were papers examining the specific experiences of African Americans in the USA (Cheney et al., 2016), Orthodox Jews in Israel (Itzhaki-Braun & Gavriel-Fried, 2022), and Roma people in the Czech Republic (Ondrasek et al., 2023). The remaining papers did not report the proportions of people of different ethnicities.

Other characteristics reported included marital status (Amadei et al., 2023; Fulginiti et al., 2016), living arrangements (Amadei et al., 2023; Fulginiti et al., 2016; Perry & Pescosolido, 2015), homelessness duration (Fulginiti et al., 2022), religion (Amadei et al., 2023; Itzhaki-Braun & Gavriel-Fried, 2022), salary (Kirst, 2009), educational level achieved (Kirst, 2009; Myers et al., 2016; Oliver & Cheff, 2014; Perry & Pescosolido, 2015), employment status (Myers et al., 2016; Perry & Pescosolido, 2015; Radcliffe & Stevens, 2008; Woodall & Boeri, 2014), sexual orientation (Fulginiti et al., 2022; Oliver & Cheff, 2014), migration generation (Pouille et al., 2021), Traveller status (Fulginiti et al., 2022) and if someone given birth in the last six months (Raymond, 2009).

Substance use descriptors were frequently provided, including: time in recovery (Anderson et al., 2021; Granfield & Cloud, 2001; Smith et al., 2023), substance(s) previously used (Anderson et al., 2021), substance(s) currently used (Boeri et al., 2016), length of time living with addiction (Granfield & Cloud, 2001), previous treatment (Cheney et al., 2016), current treatment (Rijnink et al., 2022),

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use of multiple substances (Myers et al., 2016; Pouille et al., 2021), prison experience for drug-related offences, or court-ordered community treatment (Radcliffe & Stevens, 2008), and working as a peer support worker (Anderson et al., 2021; Smith et al., 2023). Fewer papers provided mental health characteristics. Skogens and von Greiff (2020) report the proportion of participants who experienced mental ill-health in their sample. Fulginiti et al. (2022) included history of psychiatric disorder, previous treatment, unmet mental health needs, help-seeking disposition as well as adverse childhood experiences and history of discrimination. Perry and Pescosolido (2015) reported on psychiatric diagnoses and number of symptoms.

Type of marginalisation: Eight papers had a sample of people with mental health-related concerns (Amadei et al., 2023; Brown & Baker, 2020; Fulginiti et al., 2016; Perry & Pescosolido, 2015; Raymond, 2009; Takahashi et al., 2009; Wester et al., 2015; Wiencke, 2022), Timmer et al. (2022) reviewed the literature on people with multiple disadvantage in contact with the criminal justice system, Urada et al. (2021) sampled female sex workers (many who also used drugs), Fulginiti et al. (2022) and Oliver and Cheff (2014) sampled young adults experiencing homelessness, and the remaining 18 papers sampled people who used drugs. However, most populations experienced multiple types of social marginalisation.

Issue help sought for: Twenty-four papers were not focused on help-seeking for a particular issue, only incidentally reporting on help-seeking within the wider findings. No studies used the term help-seeking. We included two papers on disclosing suicidality (Fulginiti et al., 2016, 2022), one on approaching people to discuss health in the context of recent onset of mental ill-health (Perry & Pescosolido, 2015), one on support seeking for non-suicidal self-injury (Wester et al., 2015), one on advice seeking about Buprenorphine for treating opioid dependence (Garcia et al., 2022), and in line with our intention to capture 'not help-seeking', one paper that discussed why people disengaged from treatment (Radcliffe & Stevens, 2008).

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Critical appraisal within sources of evidence

Applying the Mixed Methods Appraisal Tool (MMAT: Hong et al., 2018) to SNA papers provided an initial framework for assessing quality. Whilst this allowed us to identify broad areas of strength and limitations, it provided little direction to the specific considerations for different types of social network studies. The main areas where we identified limitations were in clarity of reporting methods, particularly in how qualitative findings were synthesised and where multiple methods were used in a single paper. See tables S1 and S2 in Supplementary File.

[Insert Table 3]

Results of individual sources of evidence

In this section, we present the results of the six studies focused on help-seeking, presented in Table 3. For full details of the incidental findings see Tables S1 and S2 in the Supplementary File. In the next section we move on to present a synthesis that incorporates the results of all 30 studies.

Fulginiti et al. (2016) used a quantitative personal network approach to study disclosure of suicidality among 30 mental health outpatients, examining patterns in disclosure, and the association between individual and relational factors and disclosure. Seventy-seven percent had disclosed and all intended to disclose. People reported disclosing to a small proportion of their social networks (14%) and intending to disclose to 23%, indicating selectivity. Approximately a third of people who had previously been disclosed to would not be approached again, whilst 15% of network members were identified as new potential targets for disclosure, indicating change in disclosure intent over time. In multi-level models, ethnicity, prior disclosure, relationship type, relationship closeness, and all types of social support were associated with disclosure.

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Fulginiti et al. (2022) examined the prevalence and correlates of lifetime and concurrent suicidal disclosure to friends among young adults experiencing homelessness. They conducted secondary data analysis of a sample of 527 people who took part in an intervention study. Within young peoples' close networks, they had an average friend network size of 2.5. Thirty percent of participants had disclosed to a friend in their lifetime. Of these, 45% made this during crisis, and 55% in retrospect. Selectivity was evident in that 21% of friends were disclosed to and, of these, 45% were approached during crisis and 55% retrospectively. Lifetime and concurrent disclosure were associated with a lifetime history of unmet mental health needs and having friends who offered social support (tangible and emotional/informational). Young people who identified as transgender or gender non-conforming were more likely to disclose current suicidal thoughts. In post hoc analysis comparing findings with wider available data, there were no significant differences in disclosure patterns between friends and other relationships (family, provider, other).

Perry and Pescosolido (2015) provided a detailed theoretical underpinning for their assessment of ego, alter and network characteristics associated with discussing health issues in the context of recent onset of mental illness. They set out the Network Episode Model (Pescosolido, 1991, 1992) and although never explicitly using the term 'social capital', frame their understanding of social networks as conduits of (health-related) resources, beliefs, values, and attitudes, citing Lin (1999). Those who are approached for discussing health matters are a deliberately selected group. They elaborate on how networks dynamically influence health behaviours and decision-making through the collective ability to identify illness and support needs, and secure access to support. Additionally, network norms and culture may influence unconscious beliefs about courses of action, particularly where there are pro- or anti- health care attitudes in the network, and stigma related to mental ill-health. They highlight the mental illness onset as potentially triggering a 'network crisis' when a network structure and functions change, thus creating certain obligations and expectations of members in different roles, and with the 'sick role' introducing particular normative responses. They noted how this also places reciprocal demands on the person, raising the potential of feelings of

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inadequacy and dependence, exposure to negative evaluations and concerns about their imposition on others.

Participants had on average 15.5 regular interaction partners and an average of three whom they approached to discuss health matters. Overall and among the smaller selected group of alters there was relatively high average closeness and trust in physicians. From interviews with a sample of 171, they adopted multilevel modelling with alters (level 1) nested in egos (level 2), controlling for ego and illness characteristics. Characteristics significantly associated with activating a tie for discussion were ego age (OR 1.15) and levels of psychiatric symptoms (OR 1.09). Relating to who is approached, the alters age (1.24), experience of mental illness themselves (OR 2.52), whether they had previously suggested seeking professional support (OR 6.57), relationship closeness (OR 5.39), frequency of contact (OR 2.56) and levels of conflict (OR 0.38) were all significantly associated. Using friends as a comparison, people were more likely to approach a partner (OR 6.58), their mother (OR 5.51), or a health professional (OR 1.86), but less likely to approach a child (OR 0.16), coworker (OR 0.45) or other relationships (OR 0.17). The probability of approaching a partner or mother was significantly larger than any other type of relationship and discussing health matters with a health professional was no more likely than talking to a friend, sibling, father, or neighbour. Finally, at network level, there was less likelihood of an alter being approached in a larger network (OR 0.96) but greater likelihood where network level trust in physicians is higher (OR 1.64).

Also using personal networks and quantitative analysis, Wester et al. (2015) recruited 88 people utilising Non-Suicidal Self Injury (NSSI) support websites to examine who they sought help from and to determine if NSSI behaviour related to the frequency of reaching out, perceived helpfulness and network size. Analyses included descriptive statistics, chi-squared tests, correlations, and t-tests. Seventy-seven percent (n=68) had sought help for NSSI. Those who did not seek help had used fewer NSSI methods in their lifetime but did not differ on other variables or characteristics. Those who sought help did so rarely and typically found it 'somewhat helpful'. The average helpfulness of

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supporters was negatively related to the number of people approached, and supporters in particular roles varied in their perceived helpfulness. Teachers/professors were most helpful and family members and parents least helpful, which led to those with an immediate family member in the network having lower overall perceived helpfulness for their network compared to those who did not. People who had used more NSSI methods over their lifetime were more likely to have sought help from more people, but the number of people approached was unrelated to current methods or frequency of NSSI. The frequency of seeking help was negatively related to the number of current methods. Friends were most represented in the networks (in 46 networks, representing 79 people) followed by therapists (in 34 networks, representing 45 people).

Garcia et al. (2022) conducted a quantitative whole network study with people who used or previously used opioids, describing the people who sought advice on Buprenorphine use compared to those who gave information or discussed other issues, and aiming to predict who would seek advice. They accessed publicly available data from 202 Reddit posts and the additional 44,103 related comments, representing 4211 users, and determined a series of individual (time on the forum, buprenorphine user status) and network variables (total degree, eigenvector centrality – a measure of importance/how influential a person is, closeness, authority, and 'hub' status). A combination of individual and network factors produced the best fitting model for predicting who would seek advice on the forum. Advice seekers had higher scores for total degree, eigenvector centrality, authority, and hub status. Advice seekers were more likely to be inducting or tapering their use of Buprenorphine, and fewer of them were already established on it. Advice-seeking users sought advice on symptom management, dosage, and how to engage with their Buprenorphine provider. Non-advice-seeking posts were sharing experience, concerns, or providing guidance.

Radcliffe and Stevens (2008) interviewed 53 people who had accessed drug treatment services but dropped out prior to treatment completion, and 14 service providers. Social capital is highlighted in the results section when discussing stigma, treatment regimes, and communities of users. The

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treatment regimes (e.g., daily methadone collection) risked exposing drug user status to others, threatening loss of social capital. Fear of losing social capital contributed to disengagement from treatment. Engaging with treatment tarnished their sense of identity, associating them with 'other' drug users. This again was something that they felt risked their social capital, regardless of how much conventional social capital they had, and could lead to disengagement. People who used drugs and service providers identified that social capital exists among the drug using community (for example the status achieved through a dealing role). Participants expressed ambivalence about it, but both groups recognised this social capital could present a stronger draw than sustaining treatment engagement.

Results synthesis

How have theories of social capital been applied to help-seeking for MH/SU among people experiencing social marginalisation?

Twenty-four papers referred to social capital, including two literature reviews (Brookfield et al., 2019; Timmer et al., 2022). Of the empirical papers, one was mixed methods (Anderson et al., 2021), one quantitative (Perry & Pescosolido, 2015), and the remainder qualitative. Eighteen papers used social capital theory or described the concepts in some detail. Only two focused on help-seeking which are detailed above (Perry & Pescosolido, 2015; Radcliffe & Stevens, 2008).

Nine studies examined cessation of substance use and recovery (Anderson et al., 2021; Boeri et al., 2016; Brookfield et al., 2019; Cheney et al., 2016; Granfield & Cloud, 2001; Itzhaki-Braun & Gavriel-Fried, 2022; Ondrasek et al., 2023; Palombi et al., 2022; Smith et al., 2023). Other areas explored included mental health recovery outside of professional services (Brown & Baker, 2020), the impact of social capital on mental health treatment seeking (Wiencke, 2022), drug-related risk behaviours

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(Kirst, 2009), access to support for active crack cocaine users (Silva et al., 2021) and current/former methamphetamine users (Woodall & Boeri, 2014), social capital among homeless young women (Oliver & Cheff, 2014), and health service utilisation among people released from prison (Timmer et al., 2022). The other six papers referred in a limited way to social capital, with incidental findings of relevance to our review (Myers et al., 2016; Pouille et al., 2021; Raymond, 2009; Rijnink et al., 2022; Skogens & von Greiff, 2020; Urada et al., 2021).

Theoretical orientations

Most papers cited the seminal works of Bourdieu (1986), Coleman (1988), and Putnam (2000). Few interrogated specific elements of social capital, instead taking an exploratory approach and applying predominantly qualitative methods. Five papers described social capital and key theorists in the area, then picked up relevant findings in the discussion, reflecting the qualitative exploratory approaches of these papers (Boeri et al., 2016; Brown & Baker, 2020; Granfield & Cloud, 2001; Itzhaki-Braun & Gavriel-Fried, 2022; Woodall & Boeri, 2014). In their literature review, Timmer et al. also provided a description of social capital and emphasise Lin's work (1999).

In addition to Perry and Pescosolido (2015), who presented a detailed theoretical argument for processes influencing help-seeking in the context of mental illness, drawing from network theory of social capital (Lin, 1999) and previous work by the authors, six further studies were framed with social capital concepts elaborated by a particular theorist/theorists. None of these six were focused on help-seeking (Anderson et al., 2021; Cheney et al., 2016; Kirst, 2009; Oliver & Cheff, 2014; Silva et al., 2021; Wiencke, 2022).

Seven studies (Brookfield et al., 2019; Ondrasek et al., 2023; Palombi et al., 2022; Pouille et al., 2021; Radcliffe & Stevens, 2008; Skogens & von Greiff, 2020; Smith et al., 2023) refer to social capital within 'recovery capital', citing the work of Granfield and Cloud (Cloud & Granfield, 2008; Granfield

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et al., 1999; Granfield & Cloud, 2001). Recovery capital draws on the work of the aforementioned theorists but is a broader concept for explaining substance use recovery outside of formal treatment. It incorporates personal, physical, and cultural capital. As such, we only included papers that specifically referred to the social capital component of recovery capital. Radcliffe and Stevens (2008) was the one of these to focus on help-seeking (treatment engagement/disengagement), but reference to theory was limited to the findings and discussion. Four papers do not provide a theoretical basis for their use of social capital but make reference to social capital in the papers (Myers et al., 2016; Raymond, 2009; Rijnink et al., 2022; Urada et al., 2021).

Bonding, bridging, and linking

Six papers mentioned bonding, bridging and linking in relation to their data (Anderson et al., 2021; Boeri et al., 2016; Brookfield et al., 2019; Itzhaki-Braun & Gavriel-Fried, 2022; Oliver & Cheff, 2014; Palombi et al., 2022; Smith et al., 2023). Except for Oliver and Cheff (2014), the studies focused on people who use/used drugs. None considered bonding, bridging, and linking in relation to help-seeking.

Micro/meso/macro

Only Silva et al. (2021) stated the levels of social capital of interest to their study. They considered the micro and macro level, defining these as how individuals interact within groups and as how thoughts and behaviours influence network structures respectively. They do not apply this explicitly to understanding help-seeking.

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Findings from the studies using social capital theory

Only one paper applied social capital as the primary explanatory theory of help-seeking for MH/SU among people experiencing social marginalisation (Perry & Pescosolido, 2015). The remainder made limited reference or were focused on describing and explaining other phenomena. Incorporation of social capital within the concept of 'recovery capital' led to the inclusion of several papers about substance use recovery where there was incidental reference to and limited theorising about social capital. Nonetheless, we identified themes of relevance to our review topic, that indicate social capital and its relationship to help-seeking warrants greater theorisation and empirical testing.

Themes in how social capital theory is applied to understanding help-seeking

Fear of losing social capital

Fear of losing social capital had an important influence on whether to initially seek help, and continue to do so. People feared that being seen to be associated with a drug using community, which would be highlighted by attending treatment, could result in a loss of conventional social capital given the associated stigma (Radcliffe & Stevens, 2008; Rijnink et al., 2022). In contrast, being known to have engaged with treatment or tried to move away from substance use could risk the loss of alternative forms of social capital that marginalised communities heavily depend upon. For example, losing the status that can be attained in the drug using community (Radcliffe & Stevens, 2008) or the protection and employment offered by drug gangs (Myers et al., 2016) may disincentivise help-seeking.

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Risks of high bonding capital

A consistent theme was the risk that high bonding capital (where people in a community are well connected to one another), in the absence of bridging and linking capital, could limit the ability to attain knowledge about resources and opportunities to seek help (Anderson et al., 2021; Boeri et al., 2016; Brookfield et al., 2019; Smith et al., 2023; Timmer et al., 2022; Woodall & Boeri, 2014). Bonding capital may be beneficial for help-seeking where relationships are with people perceived as likely to be helpful or who encourage help-seeking. However, high bonding capital could also deter help-seeking where there are strong norms around abstinence that person feels they cannot or do not want to attain, or where there is a risk of rejection if someone experiences a relapse (Anderson et al., 2021; Smith et al., 2023). High bonding capital within tightknit communities where there is ignorance, stigma, and reluctance to acknowledge substance use could be equally restrictive (Itzhaki-Braun & Gavriel-Fried, 2022; Ondrasek et al., 2023), as well as where there is strong bonding capital connected to substance use (Myers et al., 2016; Radcliffe & Stevens, 2008). Most papers exploring this phenomenon were among people who use drugs. However, among those with people with mental illness, a small number of people with relationships characterised by closeness and kinship or partner roles were most likely to be approached (Perry & Pescosolido, 2015), indicating that bonding capital is still important.

Service provider functions

Service providers were seen as a source of bonding, bridging, and linking capital. Service providers were sometimes the only sources of bridging and linking capital in peoples' lives and vital for accessing support and sustaining engagement with it (Boeri et al., 2016; Oliver & Cheff, 2014; Pouille et al., 2021; Smith et al., 2023). Whilst facilitated bonding capital with other people experiencing social marginalisation was sometimes valued (Boeri et al., 2016), sometimes this was not achieved, or was not desired by participants, for example where they did not see value in building

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relationships with others struggling with their own difficulties (Brown & Baker, 2020; Pouille et al., 2021; Radcliffe & Stevens, 2008).

Past experiences impacting trust

Past experience of help-seeking had an influence on future attempts (Anderson et al., 2021; Brown & Baker, 2020; Itzhaki-Braun & Gavriel-Fried, 2022; Oliver & Cheff, 2014; Rijnink et al., 2022; Silva et al., 2021) by impacting upon trust that the response of others was likely to be helpful. This may explain findings in the quantitative SNA studies, which demonstrated selectivity and change in who was approached for help at different time points (Fulginiti et al., 2016; Perry & Pescosolido, 2010; Wester et al., 2015). Past negative experiences, harms or neglect by authority figures generally (Itzhaki-Braun & Gavriel-Fried, 2022; Oliver & Cheff, 2014; Woodall & Boeri, 2014), and service providers specifically (Anderson et al., 2021; Brown & Baker, 2020; Rijnink et al., 2022; Silva et al., 2021), could erode trust in others' and deter future attempts to seek help. For young people this contributed to a desire to prove they did not need support, or could live without it, presenting a psychological barrier to seeking help if and when needed (Oliver & Cheff, 2014). Whilst the absence of trust could be a barrier, Kirst (2009) and Oliver and Cheff (2014) highlight the importance of trust and companionship in relationships for the accrual of social capital that enables access to advice from peers and service providers. Palombi et al. (2022) noted that hoping that help will be effective plays an important role, alongside fear of what a response may be, reflecting the concept of trust in others. This was also described by women experiencing depression who felt ashamed that they did not share the common narrative of joyful pregnancy, thus fearing the response of others and avoiding seeking help (Raymond, 2009).

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Preferred sources of help

Family and friends could be preferred people to seek help from. Perry and Pescosolido (2015) demonstrate that mothers and partners were the most likely to be approached in their quantitative study. Qualitative studies provide important nuance and qualifiers in this regard. Family and friends were only approached when they presented as understanding and honest (Brown & Baker, 2020; Granfield & Cloud, 2001; Pouille et al., 2021). Further, some participants were concerned about burdening friends/family (Brown & Baker, 2020; Granfield & Cloud, 2001), or not wanting to be seen to complain (Woodall & Boeri, 2014). Friendship, family or peer support can be vulnerable to change when the person/people providing support also experience social marginalisation and limited resources (Woodall & Boeri, 2014). Further, family and friends could be actively unhelpful, with professional services with expertise preferred (Oliver & Cheff, 2014; Silva et al., 2021; Skogens & von Greiff, 2020). Peer support and mutual aid were noted as valued sources of help (Anderson et al., 2021; Brown & Baker, 2020), and alters with shared experience of mental illness were significantly more likely to be approached for health-related discussion than other alters (Perry & Pescosolido, 2015). However, it is first essential to know who and where peers are, and maintain good relationships with peer leaders to avoid ostracism (Rijnink et al., 2022), again highlighting a risk in strong bonding social capital.

Network culture

The importance of network culture and its influence over time on forming norms, beliefs and attitudes across a community has received limited specific empirical examination. Over and above the characteristics of egos and alters, the average level of pro-health care attitudes across a social network is associated with seeking help in the context of mental illness (Perry & Pescosolido, 2015). The potential impact of tensions between different cultural norms within one person's network is

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illustrated with an example from Chile where Mapuche people could be encouraged or discouraged to go to psychiatric or Machi healers by different members of their community (Wiencke, 2022).

Structural barriers

Structural barriers to help-seeking were discussed to a very limited extent. Stigma, drug laws, policy that fail to recognise opportunities for harm reduction, and wider structures that embed social marginalisation such as race, gender, sexual orientation and gender identity were all mentioned but with limited elaboration of their relevance to help-seeking (Kirst, 2009; Silva et al., 2021; Timmer et al., 2022; Urada et al., 2021). African Americans may face additional barriers to help-seeking in the USA because their ethnicity places them in a position of lesser power (Cheney et al., 2016; Timmer et al., 2022) resulting in a lack of social capital that would enable access to resources and information to facilitate help-seeking (Timmer et al., 2022). T

What insights have been gained through applying SNA to understand help-seeking for MH/SU among people experiencing social marginalisation?

Ten papers reported using social network analysis (SNA). Six used quantitative SNA: five focused on help-seeking (Fulginiti et al., 2016, 2022; Garcia et al., 2022; Perry & Pescosolido, 2015; Wester et al., 2015), and one had incidentally relevant findings (Takahashi et al., 2009). One SNA paper adopted mixed methods (Anderson et al., 2021), and three used qualitative SNA (Amadei et al., 2023; Kirst, 2009; Silva et al., 2021). Although two did not use SNA in full, instead using its concepts to guide data collection and coding of qualitative data respectively (Kirst, 2009; Silva et al., 2021), we have included them here as they engage at the relational level in their data collection and/or analysis.

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Two studies used whole network SNA, taking data from online fora (Garcia et al., 2022; Takahashi et al., 2009) and analysing data primarily statistically. Eight papers used personal network SNA. Four were quantitative (Fulginiti et al., 2016, 2022; Perry & Pescosolido, 2015; Wester et al., 2015), one used mixed methods (Anderson et al., 2021) and three were qualitative (Amadei et al., 2023; Kirst, 2009; Silva et al., 2021). Three studies involved the completion of a network map during interview (Amadei et al., 2023; Anderson et al., 2021; Fulginiti et al., 2016). Analytical approaches in the personal network studies varied, reflecting the different types of data and collection methods.

Conclusions about the utility of SNA from paper authors

Qualitative SNA was considered useful for understanding relationships and their functions (Amadei et al., 2023), including relationships from which someone could seek help. Network maps were identified as a valued interview tool for achieving more depth in understanding relationships (Amadei et al., 2023) and aiding recall for achieving data completeness (Fulginiti et al., 2016).

Useful knowledge can be generated with descriptive and exploratory statistical approaches, although full explanations are not possible without more sophisticated analyses or qualitative work (Wester et al., 2015). Multilevel modelling was emphasised for its ability to generate novel findings precluded in traditional statistical analysis, by accounting for the unique contributions of individual characteristics, relationship factors and network features (Fulginiti et al., 2016, 2022; Perry & Pescosolido, 2015).

Personal network studies collect ego perceptions of alters characteristics and the relationship qualities, which will always be subjective. Whilst this was reported as a potential limitation (Kirst, 2009; Wester et al., 2015), it is arguably an ego's perception that is of interest in understanding the relational influences upon them, although this would not capture subconscious or less obvious influences.

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Results from SNA studies could inform more nuanced network-based interventions that allow for relational level influences on individual behaviour to be considered within the wider social context (Anderson et al., 2021; Kirst, 2009).

Synthesis of SNA studies results

People selectively seek help from others when their relationships are characterised by care, helpfulness and support, availability, closeness, commitment, trust, and companionship (Amadei et al., 2023; Fulginiti et al., 2016, 2022; Kirst, 2009; Perry & Pescosolido, 2015; Silva et al., 2021; Wester et al., 2015). This selectivity is evident in that people only approach a subset of alters for help (Fulginiti et al., 2016, 2022; Perry & Pescosolido, 2015).

There are contrasting findings across studies about the type of relationships (e.g. family, friend, service provider) from whom people seek support. Among people with mental ill-health, Amadei et al. (2023) found family were most commonly approached, with professional service relationships of secondary importance. Perry and Pescosolido (2015) refine family further, identifying that mother and partner were most likely to be approached, with professional services equally as likely to be approached as neighbours, siblings, friends, and fathers. In contrast, family were least helpful for people seeking support for NSSI (Wester et al., 2015). Young adults experiencing homelessness were more likely to approach friends (Oliver & Cheff, 2014), and homeless adults using crack cocaine preferred specialist services and used emergency care (Silva et al., 2021). Peer/mutual support was viewed positively as relationships and communities that embodied care and belonging for some people seeking MH/SU support (Amadei et al., 2023; Anderson et al., 2021). This was quantitatively demonstrated by Perry and Pescosolido (2015) who found alters who shared an experience of mental illness had significantly increased odds of being approached for help. There was an intersection between friends and professional service providers, with friendship sometimes

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attributed to professionals, including religious leaders, (Amadei et al., 2023), raising the issue of defining roles clearly in network studies.

The quantitative personal network studies revealed selectivity about who within a social network help was sought from, and complexities in relationship dynamics. Among adults with mental ill-health, disclosing suicidality or seeking health discussion with a particular person is associated with alter age, having previously disclosed to that person, relationship type, closeness, social support provided in that relationship, and shared experience of mental ill-health (Fulginiti et al., 2016; Perry & Pescosolido, 2015). Previous social support was also associated with disclosure of suicidal thoughts to friends among young adults experiencing homelessness, both historically and at the time of experiencing suicidality (Fulginiti et al., 2022). Wester et al. (2015) found family members were least helpful, and having immediate family in the network was associated with lower overall helpfulness. Where a family member was approached for help, it was likely a friend and/or therapist was also approached. This could indicate the family member was unhelpful and the person looked elsewhere, or could indicate the family member performed a bridging function.

Among people accessing mental health services, the people to whom someone had disclosed and intended to disclose to differed (Fulginiti et al., 2016). This suggests that past experience of help-seeking (positive and negative) may shape selectivity around who is approached in future. Overall helpfulness of supporters is associated with seeking help from fewer people, indicating that once someone has a helpful contact, they do not approach others (Wester et al., 2015).

Discussion

This review presents a summary and synthesis of current knowledge, across diverse disciplines, of the relational influences on help-seeking for mental ill-health and substance use among people

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experiencing social marginalisation. Specifically, we examined applications of social capital theory and social network analysis.

Summary of evidence

There is limited literature that uses social capital theory or social network analysis to examine help-seeking for MH/SU among people experiencing social marginalisation. Of the few studies explicitly focused on help-seeking, the term 'help-seeking' was not widely used. Whilst we did not use help-seeking as a search term, this may have implications for future reviews attempting to examine this phenomenon. Using help-seeking as a search term in the context of MH/SU among marginalised groups may few results, and a priori theorisation and decisions about what the review team considers help-seeking will be beneficial.

There is evidence to indicate that high bonding capital among people experiencing social marginalisation to others within minority communities, in the absence of bridging and linking capital, could deter help-seeking for MH/SU. This extends the evidence on the health risks of high bonding capital (Ehsan et al., 2019; Villalonga-Olives & Kawachi, 2017) by highlighting the deterrence of help-seeking as a potential mechanism by which social capital has its effect. We noted two ways in which this mechanism may operate. Firstly, help-seeking may present a risk of losing social capital in networks and communities where social norms do not support engaging with authoritative structures, or where there is stigma towards people who have mental ill-health or substance use problems. Perceived stigma toward people in need of help, translating into internalised stigma, has been shown to negatively influence mental health help-seeking (Schnyder et al., 2017). Whilst the risk of losing social capital also applies to people who possess high levels of bridging and linking capital, arguably the risk is more pronounced for people who rely on being part of a close-knit community. Secondly, an absence of linking and bridging capital can reduce access to varied

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information (Granovetter, 1973) about when help can and should be sought, what is available, and how this might be experienced, leaving people without the information needed to decide to seek help.

Viewing social capital as the sum of resources within a network, people experiencing social marginalisation with lower bridging and linking social capital could indicate their networks hold fewer resources, and thus require people to make deliberate decisions about from whom to seek help. There were references to both seeking out friends and family, and avoidance of doing so where people were conscious of not burdening others with limited resources. This is in contrast to evidence that people make greater use of weak ties and avoid stronger ties when disclosing sensitive personal circumstances (Small, 2017), and that this process is more opportunistic than deliberative (Small & Sukhu, 2016). However, these conclusions were developed from studies with people with a greater degree of social integration (university students) who may have greater access to weak ties through their social positionality and did not examine highly stigmatised issues. Findings from our review indicated that closeness was important, along with other relationship qualities, which may be particularly important for sensitive and highly stigmatised experiences such as mental ill-health and substance use. The small volume of evidence identified in this review limits our ability to draw firm conclusions, and the importance of tie strength may warrant greater exploration in populations where there are low levels of bridging capital.

Trust, structural barriers to social capital, and variations in the preferred places to seek support, were also identified as relevant to social capital. Negative past experiences of interacting with MH/SU and authoritative services had impacted trust others' ability to provide appropriate support. Mistrust of authoritative services is a well-elucidated cultural norm that acts as a barrier to help-seeking among people experiencing social marginalisation, e.g. among people in prison (Ramesh et al., 2023) and women who use drugs (Cockroft et al., 2019). However, we identified instances where relationships with service providers were more (and sometimes the only) trusted relationships,

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which acted as a source of social capital. Trust is debated by social capital theorists, regarding whether it is characteristic of specific relationships, or a more generalised community-level asset, and whether it contributes to, results from, or is integral to social capital (Algan, 2018; Bjørnskov, 2006; Glaser et al., 1999; Torche & Valenzuela, 2011). Findings from this review indicates the importance of trust as a relationship quality that enables access to social capital, but general community levels of trust were not examined in the included papers. Trust in health care providers at an individual level varies across communities, partly explained by levels of community trust and community social capital (Ahern & Hendryx, 2003). Examining social capital and trust at community level would be of interest to examine for its relevance for people who experience marginalisation from some communities, but have strong bonding capital in communities sharing a marginalisation experience. Whilst we focused on specific groups, there are likely to be implications for other populations that experience social marginalisation for a range of reasons, such as those from minority ethnic groups, diverse sexual orientations, or different gender identities. Evident within our review was the importance of network (rather than community) attitudes towards different sources of support, which is an area that has received very little examination in groups experiencing social marginalisation and warrants further empirical examination.

Structural factors were considered to a limited extent (law and policy that fails to allow for harm reduction opportunities, sociodemographic characteristics). Future research that elaborates exactly how these macro factors influence help-seeking for MH/SU among people experiencing social marginalisation is required, particularly accounting for the intersecting experiences that further compounds disadvantage (Johnsen & Blenkinsopp, 2024). Better understanding structural influences can inform and enhance the impact of Inclusion Health policies and practice (NHS England, 2023) to assist those in greatest need of MH/SU support.

SNA methods present a useful means of empirically examining help-seeking among people experiencing social marginalisation, through use of visual network mapping, the application of multi-

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level models, and its potential for informing intervention development. Although SNA in health and social care research is increasing, the limitations in the wider evidence base are evident here in relation to help-seeking for MH/SU for people experiencing social marginalisation, including the need to better understand relational influences on health-related behaviour, the mechanisms by which social networks have their effects, and greater use of longitudinal data to understand change over time (Valente & Pitts, 2017).

The SNA findings reflect the selectivity about from whom help is sought in the qualitative studies, with preferences varying between studies. A select number of contacts were disclosed to and there were variations in their social roles (Fulginiti et al., 2016, 2022; Perry & Pescosolido, 2015; Wester et al., 2015). However, relationship qualities were potentially more important than alters' respective roles. Specifically, those relationships characterised as caring and perceived as likely to be helpful were the ones that were approached. Further, alters that participant did or would approach changed over time, reflecting the influence of past experience on where, when and from whom someone may seek help. This contrasts with less deliberative approaches to help-seeking for lower level concerns among students (Small, 2017; Small & Sukhu, 2016) and is more consistent with theories that help-seeking is a socially influenced, but still deliberative action (Pescosolido, 1991, 1992).

Qualitative studies showed that at times, participants characterised professionals as friends, highlighting a need for a clear understanding of how people define the roles of alters in their networks when measuring this in quantitative approaches. In the quantitative analyses, associated variables were identified, with some conflicting results. More studies that account for different experiences of marginalisation in different contexts could assist in furthering understanding of how social capital can be harnessed to optimise intervention effectiveness.

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Limitations of the included studies

No studies used the term help-seeking specifically. For relevant papers to be identified for future reviews, authors of primary research may consider adopting consistent terminology or including help-seeking as a key word.

We only quality appraised SNA studies and did not exclude papers on quality grounds. Our main observation was limitations in the clarity of reporting, particularly in how qualitative SNA findings were synthesised and where multiple methods were combined in a single paper. We included 30 papers and provide a broad overview of how social capital and SNA are applied, thus our findings can be read with sufficient confidence for that purpose. Our synthesis of findings from the social capital studies should be interpreted with awareness that these papers were not quality appraised.

Most papers included participants who used drugs and/or alcohol and several included participants experienced mental health challenges. Although homelessness, sex work, justice-involvement and poverty were all represented, and there are significant overlaps between populations, there is clearly a need for research that examines the unique relational dynamics arising when people experience social marginalisation due to different and multiple experiences, for example the additional challenges associated with having no stable accommodation *and* having a criminal record. Core demographics were not or could not be reported for some studies. Reporting the precise population is essential for future reviews that seek to take account of the intersecting experiences of social marginalisation including intersections between age, sex/gender, ethnicity or sexual orientation.

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Limitations of the review

We conducted the review using rigorous methods, pre-publishing our protocol and adopting PRISMA reporting standards. We searched in English and excluded papers where the full text was unavailable in English. This may have resulted in relevant literature being overlooked that could illuminate different influences on help-seeking, particularly in non-Western contexts. We nonetheless identified studies from countries with different social and cultural dynamics, across four continents.

Whilst scoping reviews often omit quality appraisal, we appraised SNA studies. It was possible to use MMAT, but it lacked detail for the interrogation of SNA elements. Development of a bespoke tool that can be used for studies adopting this method may be beneficial.

Not all full texts were screened by two independent reviewers as originally intended. At initial and interim team meetings, we determined that the level of consistency achieved between reviewers was sufficient to allow a single review of remaining papers. Additionally, extraction and synthesis were conducted by a single reviewer. Two reviewers at each stage may have added further rigour to the review.

Our focus on SNA and social capital theory prevented the inclusion of studies that drew from other theoretical bases. Future reviews could assess how other theoretical or methodological approaches have been applied to understand help-seeking for MH/SU among people experiencing social marginalisation.

Conclusion

These preliminary insights demonstrate that social capital is implicated in help-seeking for mental ill-health and substance use among people experiencing social marginalisation, and that social network analysis presents a useful method for examining the operation of social capital across the social

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networks of people experiencing social marginalisation. Further theoretical elaboration and empirical work is needed, particularly to test whether the impact of social capital on help-seeking mediates or moderates health outcomes. Future work should take account of shared and distinct phenomena across different experiences of social marginalisation, to strengthen the conclusions that can be drawn and thus inform policy, practice and intervention development.

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Author statement

Removed for anonymous review. All authors named have contributed substantially to this manuscript.

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Competing interests statement

XX, XX and XX are employed at the Salvation Army Centre for Addiction Services and Research (SACASR), University of Stirling. SACASR receives funding from The Salvation Army. The Salvation Army have no involvement or influence on this research. We have no other potential competing interest.

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Data sharing statement

Data are available in the online supplementary file. Any further details are available from the corresponding author on reasonable request.

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Table 3. Papers focused on help-seeking

Reference	Country	Help sought	Population	Sample size	Age range (mean)	Sex/ gender	Ethnicity	Other	Aim	Use of social capital	Type of SNA	Network features studied	Data collection method	Data analysis method	Results: SNA methods	Results relevant to help-seeking
Fulginiti et al. (2016)	NR	Suicidal disclosure	MH: Outpatients with severe mental illness	30 egos, 438 alters	Range NR (47.7)	57% female, 43% male	36.7% Non-Hispanic White, 46.7% Latino, 10% Multiracial, 6.7% African American	Marital status	Describe patterns of suicidal disclosure; examine association between individual-level (e.g., social support, stigma) and suicidal disclosure; examine relationships between relational level factors (e.g., availability, closeness, homophily) and suicidal disclosure	NA	Personal networks: Quantitative	Size. Alters roles.	Interview. Interviewer and network maps	Bivariate analysis. Multi-level models (alters level 1, egos level 2)	Multi-level modelling permitted novel understanding of disclosure practice taking account of individual and relational level factors Network maps assisted recall for completeness. Method could strengthen development of accurate (suicidal disclosure) profiles to inform treatment planning	77% had disclosed and 100% intended to disclose. People disclosed to only a proportion of their social networks (14%) and intended to disclose to 23%. Roughly 1/3 alters previously disclosed to would not be approached again, whilst 15% of network members were identified as new potential alters for disclosure (selectivity and change over time). Of individual factors, ethnicity remained a significant predictor of disclosure in multi-level models. Of relational factors prior disclosure, relationship type, relationship closeness, and all types of social support remained associated with disclosure in the multi-level models.
Fulginiti et al. (2022)	USA	Suicidal disclosure	MH: homeless young people	527 egos, 1318 alters	Range NR (21.0)	33.1% women, 55.3% men, 11.7% gender minority	22.9% Non-Hispanic White, 34.4% Black, 18.2% Latino, 24.5% Mixed/Other	Sexual orientation, education, homelessness duration, Traveller status, psychosocial variables, help-seeking variables.	Understand prevalence and correlates of suicide-related disclosure in YAEH friendship networks at individual and relational	NA	Personal networks Quantitative	Size. Friend types. Friend genders. Homophily (gender identity and sexual orientation). Contact frequency. Social support (tangible	Interview. Interviewer survey via laptop (self-administered, assisted)	Bivariate multilevel analysis. Multivariate multi-level models (alters level 1, egos level 2)	Shifting focus to relational level variables (that can be modified to improve access to support) may suggest these are of greater importance given inconsistent individual	Average friend network size was 2.5. 30% had disclosed to a friend in their lifetime. Of these, 45% made this during crisis, and 55% in retrospect. 21% of friends were disclosed to, and of these 45% were approached during crisis and 55% retrospectively (selectivity). Lifetime and concurrent disclosure were associated with lifetime history of unmet mental health needs and having friends who reliably offered social support

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									level, considering concurrent and retrospective disclosure			and informational/emotional).			level findings in other research	(tangible and emotional/informational). Young people who identified as transgender or gender non-conforming were more likely to disclosure current suicidal thoughts. Post hoc analysis to compare friends with other relationships (family, provider, other) found no significant differences in disclosure patterns.
Garcia et al. (2022)	Online	Advice seeking about Buprenorphine	SU: People who use/ formerly used opioids	4211 users (202 posts, 44,103 comments)	NR	NR	NR	NR	Predict advice-seeking on an online forum for buprenorphine-use	NA	Whole network Quantitative	Total degree Eigencentrality. Closeness Authority Hub	Online Webscraping book to extract posts	Descriptive statistics. Mann Whitney-U and ChiSq tests with post-hoc comparisons (Benjamin-Hochberg). Generalised Linear Models	Combining individual and network factors produced the best fitting model for predicting advice-seeking in forum users	Advice-seeking posts were associated with people using (rather than formerly using) Buprenorphine. Advice seeking was associated with having fewer and less close social connections. Combining network and individual characteristics were better indicators of advice-seeking than either alone.
Perry & Pescosolido (2015)	USA	Health discussion in context of recent onset mental illness	MH: People with a recent onset mental illness	171 egos, 2593 alters	16-72 (30.6)	64% women	73% White, 27% Black	Diagnosis, psychiatric symptoms, education, living situation, employment status	1) Identify how ego, alter, relationship and network characteristics impact tie activation for health matters during early stages of mental illness. (also to assess impact of this on recovery - not relevant to this review)	Network Episode Model and network theory. Frames networks as conduits of (health related) resources, beliefs, values and attitudes. Networks influence help-seeking through identifying illness and support, securing access to support, having pro/anti health care culture that influences beliefs about help-seeking. Activating ties in	Personal networks: Quantitative	Size Proportion women Proportion kin Closeness Physician trust	In person interview	Identifying characteristics associated with activation health discussion ties using multilevel model (random intercepts) with alters at level 1 and egos at level 2.	Allows analysis at multiple levels (ego, alter, and network)	Regular interaction partners = mean 15.5. Network partners selected for health discussion = 3. Whole network and alters health discussed with characterised by very close ties (mean 2.64/3) with moderately high trust in physicians (mean 2.34/3). 20% of all alters are selected as health discussants (selectivity). Variables positively associated with health discussion - Ego: age, levels of psychiatric symptoms Alters: age, having a mental illness, having suggested seeking help, being mother or partner. Ties: closeness, frequency of contact Network: trust in health professionals Negatively associated - Ties: conflict/hassles/problems less likely. Alters in larger networks less likely to be approached

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										relation to health as deliberately selective Mental illness onset could cause 'network crisis' - when structure and alters' functions change, and norm expectations placed om alters and ego. Level studied (micro/ meso/ macro): Terms not used Bonding, bridging of linking: Terms not used Theorists cited: Lin (1999), Bourdieu (1986) Framing: Not explicit but utilises Lin's (1999) network theory of social capital and Bourdieu's (1986) cultural capital						

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Radcliffe & Stevens (2008)	UK (England)	Substance use treatment engagement/ disengagement	SU: people who dropped out of treatment and service providers	53 people who use drugs, 14 staff	19-50 (Mean NR)	26% women, 74% men	75% White British, 8% Black British, 9% Mixed Heritage, 2% Asian British, 2% Traveller	Receipt of welfare benefits, employment status, time in prison for drug-related offences, drug treatment services mandated by court order.	Exploring the relationship between shame and stigma, and engaging in treatment services	Level studied (micro/meso/macro): Terms not used Bonding, bridging of linking: Terms not used Theorists cited: Granfield and Coud (recovery capital) Framing: none		NA	NA	NA	NA	Introduce social capital in discussing findings Treatment regimes and engaging with treatment risked exposing drug user status and tarnished personal sense of identity (associating with 'other' drug users) - which risked social capital from 'conventional' society. Fear of losing social capital from 'conventional' society contributed to disengagement from treatment (heroin use easier to conceal and more flexible), regardless of how much social capital they had. Social capital exists in drug using communities (belonging, status, roles, networks) and treatment engagement would prompt loss of this
Wester et al. (2015)	Online	Non-suicidal self injury (NSSI)	MH: People who engage /engaged in non-suicidal self-injurers.	88 egos (68 in network analysis), 212 alters	18-62 (27.2)	92% female, 8% male	83% White/European American, 7% Multiracial, 3% Hispanic/Latino/a, 2% Asian, 1% Black/African-American, 4% NR.	NR	Examine: who people who self-injure seek help from, how frequently and if it is helpful; supporter roles; differences in NSSI between those who seek help and those who don't; relationships between NSSI and frequency of help-seeking, perceived helpfulness and size of network		Personal networks: Quantitative	Role, helpfulness	Quantitative Survey	Descriptive statistics, Chisq and t-tests	NR	Number of supporters ranged from 1 to 7 with mean network size 3.16 and mode 2 Friends most represented in the networks followed by therapists. Where someone had a friend in the network, 94% had at least one other supporter. People with family in their network were more likely to also have friends and therapists. Having a friend in the network was related to also having a therapist. Average supporter network helpfulness was negatively related to number of people approached. Teachers/professors were most helpful and family members/parents the least helpful. Those with immediate family in the network had lower overall perceived supporter network helpfulness. People who used more NSSI methods over their lifetime were more likely to have sought help from more people. Frequency of seeking help was negatively related to number of current methods.

Abbreviations: ChiSq – Chi Squared test; MH – mental health; NR – not reported; NSSI – non suicidal self-injury; SU – substance use

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Supplementary file

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Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	1
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	7-8
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	8
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	9
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	9
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	9
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	10-11 and supplementary file
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	11-12
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	12
Data items	11	12	12
Critical appraisal of individual	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence;	13

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SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
sources of evidence§		describe the methods used and how this information was used in any data synthesis (if appropriate).	
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	13
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	14
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	15-19
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	19, Tables S1 and S2
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	20-23, Table 1, Tables S1 and S2
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	24-33
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	34-37
Limitations	20	Discuss the limitations of the scoping review process.	38
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	38-39
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	51 (removed for anon review)

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Search strategies

Criminal Justice Abstracts via EBSCO Host

#	Query	Limiters/Expanders	Results
S3	(S1 AND S2)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	220
S2	TI (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR SU (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR AB (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR KW (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	86,290

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S1	TI ("social network analysis" or "social capital") OR SU ("social network analysis" or "social capital") OR AB ("social network analysis" or "social capital") OR KW ("social network analysis" or "social capital")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,138

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EMBASE via OVID

Embase <1974 to 2023 June 26>

1	social capital.mp. or social capital/	6193
2	social network analysis.mp. or social network analysis/	3001
3	"substance use".mp. or "substance use"/	70073
4	"substance abuse".mp. or substance abuse/	76105
5	drug misuse/ or substance misuse.mp.	13383
6	addiction/ or addiction.mp.	153427
7	drug dependence.mp. or drug dependence/	78207
8	alcohol dependence.mp. or alcoholism/	133979
9	mental health.mp. or mental health/	401346
10	mental illness.mp. or mental disease/	293832
11	psychosis/ or psychosis.mp.	149976
12	schizophrenia.mp. or schizophrenia/	234078
13	depression/ or depression.mp.	852167
14	anxiety/ or anxiety.mp.	494771
15	"personality disorder".mp. or personality disorder/	54470
16	"eating disorder".mp. or eating disorder/	41607
17	post traumatic stress disorder.mp. or posttraumatic stress disorder/	83078
18	suicidal ideation/ or suicide/ or suicidal behavior/	102925
19	suicid*.mp.	161363
20	1 or 2	9129
21	3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19	2116872
22	20 and 21	1843

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SocINDEX via EBSCO Host

#	Query	Limiters/Expanders	Results
S3	(S1 AND S2)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	628
S2	TI (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR AB (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR KW (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR SU (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	181,460
S1	TI ("social network analysis" or "social capital") OR AB ("social network analysis" or "social capital") OR KW ("social network analysis" or "social capital") OR SU ("social network analysis" or "social capital")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	11,717

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Web of Science

TS=("Social capital" OR "social network analysis")

AND

TS=("Substance use" or "substance abuse" or "substance misuse" or "addiction" or "drug dependence" or "alcohol dependence" or "mental health" or "mental illness" or "psychosis" or "schizophrenia" or "depression" or "anxiety" or "personality disorder" or "eating disorder" or "post traumatic stress disorder" or "suicide" or "suicidal")

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Table S1: Papers referring to social capital

STUDY INFO								HELP SEEKING	HOW HAS SOCIAL CAPITAL THEORIES BEEN					
First Author	Country	Population	Sample size	Age range (mean)	Sex/ gender	Ethnicity	Other	Help-seeking focus	Aim	Focus on social capital	Level studied (micro/meso/ macro)	Type studied	Theorists	Results relevant to help-seeking
Anderson et al. (2021)	UK (Scotland)	SU: peer-workers	10	Range 31-53 (median 41)	100% male	NR	Time in recovery, peer worker status	Incidental	Increase understanding of recovery capital and social identity using mixed methods social network analysis	Explicit	Terms not used	Explicit: Bonding and bridging	Framing: Putnam Cite: Network scientists	High bonding social capital within both drug using and recovery networks. Many participants were previously unsuccessful in accessing SU support, at a time when their networks were more characterised by bonding capital with other people who used drugs/alcohol (link to help-seeking not explicit). Some sought the stability of addiction services whilst others viewed services as unhelpful (due to limited opening, a perception that they were 'ticking boxes', and offering unwanted solutions).
Boeri et al. (2016)	USA	SU: Active and former drug users	29	Reported as age bands: 18-29 and 30+	48% female, 52% male	66% White, 31% African American, 3% Hispanic	Using 'hard drugs'.	Incidental	Understand how people with problematic drug use and low-socioeconomic status access social networks to gain positive social capital over the life course	Explicit	Terms not used	Explicit	Framing: None Cite: Bourdieu & others	Limitations in treatment programs in providing wider bridging and linking social capital. This may reduce their impact and attractiveness to people to sustain engagement. By encouraging the sharing of experiences, and facilitating bonding social capital, they could sustain engagement. Family and friends were important sources from which to seek informal help, but without providing bridging/linking social capital, the impact of treatment could be short-lived.
Brookfield et al. (2019)	Lit review	SU: Methamphetamine users	NA	NA	NA	NA	NA	Incidental	Understand how to tailor support for methamphetamine users through meta-ethnography of experiences of cessation, recovery, and relapse	Explicit	Terms not used	Explicit: Bonding and bridging	Framing: none. Cite: Granfield & Cloud	Potential for strong bonding social capital acting as a constraint on actions for change and risking contagion of unhelpful behaviours. Social capital determines the options available to people using drugs, including access to support, information, guidance and resources. Social capital is not static.
Brown & Baker (2020)	UK (England)	MH: People who have received treatment	32	22-67 (NR)	47% female, 53 % male	NR	Occupational background, welfare benefit receipt,	Incidental	Explore recovery experiences beyond health and social care or focussed on symptom management	Explicit	Terms not used	Terms not used	Framing: none Cite: Bourdieu & others	By engaging in activities that consolidated a more rounded identity, people accessed and provided support in natural contexts. This was more attractive than seeking professional help, which some reported finding paternalistic or unhelpful. Participants noted that available friends and family was a privilege not shared by all. They made strategic choices about from whom and when they sought help to avoid 'bothering people too heavily'.
Cheney et al. (2016)	USA	SU: People using and not in treatment.	51	18-61 (36.1)	47% female, 53 % male	100% African American	Previously received treatment	Incidental	Understand how lifestyle and social network changes facilitate access to social capital needed to change cocaine use patterns, by	Explicit	Terms not used	Terms not used	Framing: Bourdieu	African Americans, particularly outside urban conurbations, experience personal, cultural, and structural barriers to accessing help and may rely on existing personal networks for help to a larger extent. They relate this to Bourdieu's ideas around the struggle for power, and their position in society that limits access to conventional social capital.

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									exploring factors underlying African American cocaine users' decisions to reduce or quit cocaine use					
Granfield & Cloud (2001)	USA	SU: People dependent on drugs/alcohol	46	Range NR (38.4)	40% female, 60% male	96% White	Addiction length, time in recovery, class backgrounds	Incidental	Examination role of social capital in self-recovery from alcohol- and drug-use problems	Explicit	Terms not used	Terms not used	Framing: none Cite: Bourdieu, Coleman, Putnam & others	Granfield focuses on recovery without formal treatment. Friends and family could be the only source of help to which participants felt they could turn, but the 'sympathy credit' was noted as something that could be exhausted when drawing on intimacy and the commitment towards them held by others.
Itzhaki-Braun & Gavriel-Fried (2022)	Israel	SU: People who formerly used drugs	14	21-45 (26.9)	100% male	100% Ultraorthodox jews	Addiction length, time in remission	Incidental	Understanding pathways of ultraorthodox Jews into and out of SU	Explicit	Terms not used	Explicit: bonding (minor reference)	Framing: none Cite: Coleman, Putnam & others	Participants had felt unseen and unheard (rejected and ostracised) which reduced trust in others to offer support if asked, and prevented them asking for help. This was in the context of communities with strong bonding capital and limited knowledge and acceptance of SU that influenced the capacity and will of alters to know what to do and provide that.
Kirst (2009)	Canada	SU: people who use drugs	80	Range NR (42)	48% female, 52% male	NR	Income, education level	Incidental	Understand how social capital can influence risk and health behaviours of people who inject drugs and smoke crack	Explicit	Terms not used	Terms not used	Framing: Coleman Cite: Bourdieu, Putnam & others	Need for trust and companionship in relationships to facilitate access to/seeking of drug related advice. Services could erect barriers that deterred help-seeking, such as restricted hours. Harm reduction services were limited in what they could offer when in the context of restrictive public health and drug policies. These barriers to access may render the act of help-seeking too burdensome for people (not explicitly linked to social capital).
Myers et al (2016)	South Africa	SU: alcohol and drug users	23 AOD users, 14 SPs	16-21 (18.7)	AOD users: 100% women. SPs: 64% female, 36% male	AOD users: 52% Black African, 48% 'coloured'	Marital status, employment status education level, weekly polysubstance use SPs: 5 health, 4 social welfare, 4 AOD treatment, 1 law enforcement	Incidental	Understand how the environment of poor young women who use alcohol or drugs informs access to and use of health services	Incidental	Terms not used	Terms not used	Framing: none Cite: none	In the context of poverty and gang-embeddedness, there was a reliance on drug use, gang involvement and related activity for social capital and ultimately survival. This led to a reluctance to seek help for SU, as recovery may disrupt the income sources and status. There was a sense of hopelessness about seeking help, as participants were sceptical that anything could be achieved when returning to their context.
Oliver & Cheff (2014)	Canada	SU: homeless young women	8	15-21 (18.4)	100% women	25% Caucasian, 13% West Indian, 13% South Asian, 13% Ojibwe,	Sexual orientation, education level	Incidental	Explore how young women experiencing homelessness form attachments and accrue social capital outside of the nuclear family unit	Explicit	Terms not used	Explicit: all	Framing: Putnam Cite: youth theorists	Participants felt alienated from support due to a distrust of providers, often based on past experiences. A trusted professional contact could act as a source of bridging social capital, by encouraging and facilitating help-seeking from other sources. In considering the distinct experiences of young people, an individualist narrative emerged as a barrier to help-seeking. The participants felt a need to 'make it on their own' and devalued social

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						13% Native Canadian, 13% Congolese, 13% Metis,								connections, potentially due to their age and need to assert their autonomy, but also due to repeat experiences of being hurt by others.
Ondrasek et al. (2023)	Czech Republic	SU: Roma people	8	NR	NR	100% Roma	NR	Incidental	Explain high rates of self-recovery among Roma people who use drugs, within the socio-cultural context	Explicit	Terms not used	Terms not used	Framing: none Cite: Granfield & Cloud	Cultural norms in the minority Roma community in the Czech Republic can prevent help-seeking. Norms include more acceptance of SU, little interest in treatment services, less knowledge about safe and unsafe SU, mistrust of majority institutions and concerns about risk of losing contact with family. Often SU, when it reaches a level perceived as problematic by the community, collective decisions to intervene are made. Intervention is imposed, using the strong bonding capital within the community to coerce and monitor behavioural change.
Palombi et al. (2022)	USA	SU: people in recovery	64	NR	NR	Over 85% white (only focus group level data given)	Drug court participation, city/township population, household income	Incidental	Examining the construct of social capital for people in short- and long-term recovery from substance use problems living in rural communities	Explicit	Terms not used	Explicit	Framing: None. Cite: Granfield & Cloud	Participants held hope for help working, but fears about what a response may be that could prevent them seeking it. Some people initially mandated to attend could come to an appreciation of being held to account. Others were encouraged by a partner to seek help.
Perry & Pescosolido (2015)	USA	MH: People with a recent onset of mental illness	171	16-72 (30.6)	64% women	73% White, 27% Black	Diagnosis, psychiatric symptoms, education, living situation, employment status	Explicit	Examining factors associated with activating social toes for health-related discussion	Implicit	Terms not used	Terms not used	Framing: Lin (not explicit). Cite: others	Regular interaction partners = mean 15.5. Network partners with whom health issues are discussed = mean 3. Sample mostly had close ties (mean 2.64/3) with moderately high trust in physicians (mean 2.34/3). 20% of all alters are selected as health discussants suggesting selectivity. Ego age and higher levels of psychiatric symptoms associated with increased odds of health discussion. Among alters, age, having a mental illness and having first suggested seeking help were associated with increased odds of health discussion. Relationships characterised by closeness and frequent contact more likely to be activated, those with conflict/hassles/problems less likely. Mother and health professional more likely to be approached than friend or partner. A child or co-worker less likely than a friend. Greatest likelihood of approach is mother or partner. Health professional no more likely that father, sibling, friend or neighbour. Alters in larger networks less likely to be approached. Networks with higher levels of physician trust had greater odds of seeking help.
Pouille et al. (2021)	Belgium	SU: People in recovery - migrants and ethnic minorities	34	18-60 (38)	12% women, 78% male	Ethnicity NR (country of origin)	Range of substances, migrant generation	Incidental	Explore experiences of migrant sand ethnic minorities in recovery from problem substance use; personal, social, and	Incidental	Terms not used	Terms not used	Framing: Granfield & Cloud	Participants described the people they could count on for help as understanding and honest, and it was these family members, partners, friends and peers they turned to. Some participants sought help from a religious deity. Participants described avoiding services when they thought there would be easily

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									community recovery resources that facilitate recovery; and elucidate barriers to recovery					available substances, and some only made contact through an existing service.
Radcliffe & Stevens (2008)	UK (England)	SU: people who dropped out of treatment and service providers	53 drug users, 14 treatment staff	19-50 (Mean NR)	26% women, 74% men	75% White British, 8% Black British, 9% Mixed Heritage, 2% Asian British, 2% Traveller	Receipt of welfare benefits, employment status, time in prison for drug-related offences, drug treatment services mandated by court order.	Explicit	Exploring the relationship between shame and stigma, and engaging in treatment services	Explicit	Terms not used	Terms not used	Framing: none Cite: Granfield & Cloud	Treatment regimes risked exposing drug user status to others, thus threatening loss of social capital. Fear of losing social capital contributed to disengagement from treatment as heroin use allowed greater concealment and flexibility. Engaging with treatment tarnished the participants' sense of identity, associating them with 'other' drug users. This also risked their social capital, regardless of how much conventional social capital they had. Social capital exists among the drug using community. Participants expressed ambivalence towards this, but sustaining this social capital could conflict with treatment engagement. Service providers identified that status and identity associated with drug use was a draw to people with few other avenues to accrue social capital, and which could prompt disengagement.
Raymond (2009)	UK (England)	MH: women who had depression during pregnancy	9	23-40	100% women	3 White British (33%), 3 White Other (33%), 1 Black Caribbean, 1 Black African, 1 Mixed Asian/British	Recently given birth	Incidental	Understanding antenatal depression and identify support mechanisms during pregnancy.	Incidental	Terms not used	NA (incidental social capital only)	Framing: none Cite: none	Participants described shame or believing that negative feelings should be hidden because of cultural narratives around pregnancy and joy. This was less of a concern when a pregnant woman had access to continuity of care from a small, trusted team. There were service barriers to help-seeking where they felt that they couldn't or shouldn't ask for MH support from their existing teams, or that their own needs were secondary to that of their child. Social capital is introduced in the context of the need for women to find connection and mutual support from peers and other informal sources.
Rijnink et al. (2022)	Aotearoa New Zealand	SU: people who inject drugs	13 PWID 1 staff member	30-51 (mean NR)	43% female, 57% male	NR	Opioid substitution therapy status	Incidental	Explore experiences of people who inject drugs who rely on a needle exchange mobile outreach service	Incidental	Terms not used	NA (incidental social capital only)	Framing: none Cite: none	In disaster and emergency situations there may be a perception, or reality, that help for SU is not there to ask for. Participants described needing to know who key peer contacts were and that they could help, and the importance of keeping good relations so that they did not lose out when others were favoured. Barriers to seeking help were the judgement experienced and fear of reporting by pharmacy staff, and the need to protect one's identity and social status by not being seen accessing support.
Silva et al. (2021)	Brazil	SU: Homeless people who use crack cocaine	17 SUs, 4 staff (+ethnography)	22-53 (mean NR)	65% female, 35% male	94% Black or Brown	Monthly income	Incidental	Analyse characteristics of social support networks of individuals who used crack cocaine and supported by a Brazilian health program for people living on the street	Explicit	Explicit: Micro/macro	Terms not used	Framing: Lin Cite: Lin	Participants looked for help from specialist providers over psychiatric or family support. The important characteristics were friendliness. They also relied on emergency services.
Skogens & von	Sweden	SU: young adults post treatment	21	25-33 (29)	76% female,	NR	MH problems,	Incidental	Examine how recovery over five years was related	Incidental	Terms not used	NA (incidental social	Framing: Granfield & Cloud.	Through engaging in treatment to resolve SU, some participants identified unmet MH needs. Recognition of previously obscured or un-

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grief (2020)					24% male		relationship status		to former alcohol and drug problems, other problems and processes of change			capital only)	Cite: Bourdieu & others.	acknowledge mental ill-health led to seeking MH support. Participants wanted to be taken seriously by people with MH expertise, seeking support outside the SU recovery community. The support most often desired was more 'ordinary' life support, that could be filled through social capital.
Smith et al. (2023)	UK (England)	SU: patients in harm reduction service	7	Early 20s to late 40s	29% female, 71% male	NR	Peer mentor status, time in recovery services	Incidental	Explore experience of recovery from problem substance using captured images and descriptions	Explicit	Terms not used	Explicit: Bonding and bridging	Framing: none Cite: Granfield & Cloud	Participants described isolation from potential sources of support, feeling alienated from any source of community or trusted confidents they could ask for help. Some experienced relief from 12-step-commuities where they could identify with others. Fear of relapse motivated continued engagement. Others expressed reluctance to reach out to people experiencing SU, and could experience alienation and exclusivity in 12-step communities if they could not relate to the group. As they were already using services, workers encouraged help-seeking for other issues.
Timmer et al. (2022)	Literature review	People experiencing multiple disadvantage	NA	NA	NA	NA	NA	Incidental	Develop an integrated theory of health care utilisation for justice involved people experiencing multiple disadvantage	Explicit	Terms not used	Terms not used	Framing: none Cite: Lin, Bourdieu, Putnam	Argues that people released from custody (and experiencing multiple disadvantage) possess limited social capital and thus may lack knowledge about, and ability to navigate, the healthcare landscape to access care. This is exacerbated for racialised groups and potentially other minoritised identities, because of the intersectional disadvantages that impact accrual of social capital. They draw on a range of literature to propose this hypothesis and argue for the need for further testing of this model. They highlight the potentially reduced network size and thus fewer people to ask for support, return to areas where resources are limited, and stigma and racial discrimination as barriers.
Urada et al (2021)	Mexico	SU: female sex workers	195 for quantitative part. Interviews with 16 professionals. Focus groups with 45 women	NR	100% Female	NR	NR	Incidental	Understand if assets-based community developments make a difference to the lives of sex workers.	Incidental	Terms not used	NA (incidental social capital only)	Framing: none Cite: none	Government providers present a negative view of the potential for help-seeking among women who use drugs, suggesting that people don't ask for help with SU, that they don't want help, and that they know and are fearful of societal rejection that can lead them to avoid going out. Potential of community empowerment initiatives to facilitate building of social capital in under-served areas or for people experiencing marginalisation.
Wiencke (2022)	Chile	MH: patients, and their relatives, neighbours, Mapuche healers, and psychiatric staff	27	NR	NR	NR	NR	Incidental	Learn about how social capital impacts people in mental health treatment	Explicit	Terms not used	Terms not used	Framing: Putnam Cite: Putnam	There are conflicts between the psychiatric and traditional approaches with churches having a strong influence and some churches actively discouraging consultation of traditional healers (machis). Although staff thought confusion may be a barrier, this was not seen patient interviews. In one example case, the person seeks help first from the machis in line with his beliefs, before family members enforced a psychiatric consultation. Other patients experienced pressure to stop accessing machi.

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Woodall & Boeri (2014)	USA	SU: women who use/formerly used methamphetamine	30	19-51 (mean NR)	100% Female	87% White, 7% Latino, 3% African American, 3% American Indian	Income, employment status	Incidental	Examine how low-income women using methamphetamine the suburbs access resources, and how resources and networks impacts choices and outcomes	Explicit	Terms not used	Cited but not used	Framing: none. Cite: Bourdieu, Coleman, Putnam & others	For some women, seeking help relied on the material and practical support of others. This could be from people with their own difficulties, or a single person, that left a woman vulnerable should the relationship change. Women stopped looking for help after attempts had been unsuccessful. They grew used to having needs met in other places, which may or may not be healthy options. There was reluctance to talk about failed access attempts or lack of resources for fear of being seen to complain.

Abbreviations: AOD = alcohol or drugs, MH = mental ill-health, NR = not reported, SPs = service providers, SU = substance use

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Table S2: Papers using SNA

STUDY INFORMATION								HELP-SEEKING	INSIGHTS GAINED THROUGH SNA							QUALITY
Reference	**Country**	**Population**	**Sample size**	**Age range (mean)**	**Sex/gender**	**Ethnicity**	**Other**	**Help-seeking focus**	**Aim**	**SNA type**	**Network features**	**Data collection**	**Data analysis**	**Results relevant to methods**	**Result relevant to help-seeking**	**MMAT**
Amadei et al. (2023)	Brazil	MH: Patients	16	22-59 (44)	38% female, 62% male	81% white, 13% brown, 6% black	Marital status, living arrangements, religion	Incidental	Analyse the structural characteristics, functions and attributes of the bonds in the users of the psychosocial care centre	Personal network Qualitative	Size Density Homophily Alters role Tie function	In person: Interview and network maps. File reviews. Institutional record review	Merging of network maps	SNA useful for understanding relationships and their functions (inc. help-seeking). Co-producing network maps a useful strategy.	People sought out relationships characterised by care, help, support, availability and commitment. Family were most commonly approached with professional service relationships second. Community mutual support was viewed positively, though not explicitly for MH support. They were experienced as places of care and belonging. There was an intersection between friends and service providers, with friendship sometimes attributed to professionals/religious leaders.	Lacks clarity in reporting analysis and how the qualitative data were integrated with the maps at individual and group level.
Anderson et al. (2021)	UK (Scotland)	SU: peer-workers	10	Range 31-53 (median 41)	100% male	NR	Time in recovery, peer worker status	Incidental	To expand the conception of recovery capital and social identity	Personal networks Mixed methods	Size. Density. Closeness. Homophily. Constraint. Transitivity. Betweenness centrality. Alters influence (negative/ positive). Network size. Network density. Closeness (and mean closeness for network-level). Homophily (E-I Index measured on network-level). Constraint. Transitivity. Betweenne	In person: Interview and network maps.	Descriptive statistics. Variables converted to individual-level attributes for T-test and Z-test. Thematic analysis.	Demonstrated change in networks over time of transition (recovery), which could inform optimal intervention planning. The relational focus alone may omit insights into structural factors	People attempting to maintain abstinence could experience guilt in relation to their social networks where others continued to use substances, implying seeking support could be more difficult in this context, A participant highlighted how prison had been an opportunity due to forced abstinence and access peer support indicating that help-seeking may be more difficult when services or peer support are not visible. The dense networks of people in recovery mirrored those of people still using substances. In the former the structure could be supportive in maintaining abstinence (and potentially accessing help, whilst the latter could both support and restrict recovery efforts.	Small sample and use of retrospective accounts of previous networks may result in recall bias. Limited details on the alter characteristic. Qualitative components are more robust than the statistical comparison.

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											ss centralisation.				
Fulginiti et al. (2016)	NR	MH: Outpatients with SMI	30 egos, 438 alters	Range NR (47.7)	57% female, 43% male	36.7% Non-Hispanic White, 46.7% Latino, 10% Multiracial, 6.7% African American	Marital status	Explicit	Describe patterns of suicidal disclosure and "examine associations between individual-level (e.g., social support, stigma) and suicidal disclosure and relational level factors (e.g., availability, closeness, homophily) and suicidal disclosure."	Personal Quantitative	Size Alters roles	In person: Interview and network maps	Bivariate analysis Multi-level models (alters level 1, egos level 2)	Multi-level modelling permitted novel understanding of disclosure practice taking account of individual and relational level factors Network maps assisted recall for completeness. Method could strengthen development of accurate (suicidal disclosure) profiles to inform treatment planning	77% had disclosed and 100% intended to disclose. People disclosed to only a proportion of their social networks (14%) and intended to disclose to 23%. Roughly 1/3 alters previously disclosed to would not be approached again, whilst 15% of network members were identified as new potential alters for disclosure (selectivity and change over time). Of individual factors, ethnicity remained a significant predictor of disclosure in multi-level models. Of relational factors prior disclosure, relationship type, relationship closeness, and all types of social support remained associated with disclosure in the multi-level models.	Methods detail is thin: unclear how the sample were recruited. Modelling description is unclear.
Fulginiti et al. (2022)	USA	MH: homeless young people	527 egos, 1318 alters	Range NR (21.0)	33.1% female, 55.3% male, 11.7% gender minority	22.9% Non-Hispanic White, 34.4% Black, 18.2% Latino, 24.5% Mixed/Other	Sexual orientation, education, homelessness duration, Traveller status, psychosocial variables, help-seeking variables	Explicit	Understand the prevalence and correlates of suicide-related disclosure in YAEH friendship networks at individual and relational level,	Personal Quantitative	Size. Friend types. Friend genders. Homophily (gender identity and sexual orientation). Contact frequency. Social support (tangible and informational/emotional).	In person: survey via laptop (self-administered or assisted)	Bivariate multilevel analysis Multivariate multi-level models (alters level 1, egos level 2)	Finding relational level variables that can be modified to improve access to support overcomes the inconsistent individual level findings	Average friend network size was 2.5. 30% had disclosed to a friend in their lifetime. Of these, 45% made this during crisis, and 55% in retrospect. 21% of friends were disclosed to, and of these 45% were approached during crisis and 55% retrospectively (selectivity). Lifetime and concurrent disclosure were associated with lifetime history of unmet mental health needs and having friends who reliably offered social support	Well presented

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									considering concurrent and retrospective disclosure				in other research	(tangible and emotional/informational). Young people who identified as transgender or gender non-conforming were more likely to disclosure current suicidal thoughts. Post hoc analysis to compare friends with other relationships (family, provider, other) found no significant differences in disclosure patterns.	

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Garcia et al. (2022)	Online	SU: People who use/formerly used opioids	4211 users (202 posts (44,103 comments)	NR	NR	NR	NR	Explicit	1) identify and describe advice-seekers on Reddit for buprenorphine-naloxone use using text annotation, social network analysis, and statistical modelling techniques. 2) predict advice-seeking	Whole Quantitative	Total degree. Eigencentrality. Closeness. Authority. Hub	Online: Webscraping tools used to extract relevant posts	Descriptive statistics. Mann Whitney U and ChiSq tests with post-hoc comparisons (Benjamin-Hochberg). Generalized Linear Models	Combining individual and network factors produced the best fitting model for predicting advice-seeking in forum users	Advice-seeking posts were associated with people using (rather than formerly using) Buprenorphine. Advice seeking was associated with having fewer and less close social connections. Combining network and individual characteristics were better indicators of advice-seeking than either alone.	Well presented in terms of approach, although sample representativeness is unclear. Analysis is logical. Supplementary data presented reflecting good open science.

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Kirst (2009)	Canada	SU: people who use drugs	80	Range NR (42)	48% female, 52% male	NR	Income, education level	Incidental	Understand how social capital can influence risk and health behaviours of injecting drug users and crack smokers - comparative examination	Personal Qualitative	Trust. Reciprocity. Companionship. Norms. Exchange of health information.	In person: Interview	Coding sensitised by the literature followed by development of themes	Can demonstrate the complexities of social capital and the structural factors that influence decision making	See social capital section.	Well justified questions and data collection justified. Analysis lacks clarity about its deductive/inductive nature and the way the networks were analysed is not elaborated – but presents a coherent account of the issues identified.

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Perry & Pescosolido (2015)	USA	MH: People with a recent onset of illness	171	16-72 (30.6)	64% women	73% white, 27% black	Diagnosis, psychiatric symptoms, education, living situation, employment status	Explicit	1) Identify how ego, alter, relationship and network characteristics impact tie activation for health matters during early stages of mental illness. (also to assess impact of this on recovery - not relevant to this review)	Personal Quantitative	Size Proportion of women Proportion of kin Closeness Trust in physicians	In person: interview	Identifying characteristics associated with activation health discussion ties using multilevel model (random intercepts) with alters at level 1 and egos at level 2	Allows analysis at multiple levels (ego, alter, and network)	See social capital section	Well reported with clarity on limitations
Silva et al. (2021	Brazil	SU: Homeless people who use	17 SUs, 4 staff (+ethnography)	22-53 (mean NR)	65% female, 35% male	94% black or brown	Monthly income	Incidental	Explore social support networks	Personal Qualitative	Number of people/institutions participants' network.	In person: Interview. Ethnographic observation	Deductive coding considering micro and macro	NR	Participants looked for help from specialist providers over psychiatric or family support. The important characteristics	Overall the paper is difficult to follow in terms of

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		crack cocaine									Components linked to. Interaction type. Relationship strength/extent. Characteristics related to reciprocities. Boundaries from a group	. Focus group.	factors. Graphic representation of network maps Content analysis		were friendliness. They also relied on emergency services.	what was collected and how it was analysed in relation to the SNA aspect of the study
Takahashi et al. (2009)	Japan	MH: People with self-reported depressive tendencies who used a particular social networking site	105 for questionnaire, 31 for survey	21-57 (median 36)	51% male	NR	NR	Incidental	Examine benefits and harms of online peer support networks	Whole Quantitative (uses other methods but not other SNA methods)	Degree. Closeness. Betweenness. Cliques (3+ members). Homophily.	Online: Survey. Webscraping interactions between users	Graphed whole network Analysis of cliques Odds ratios to examine homophily.		None	Used multiple different methods, but don't display or discuss many results of the SNA aspect in any detail or integrate these coherently.
Wester et al. (2015)	Online	MH: People who engage /engaged in non-suicidal self-injurers.	88 (68 in network analysis)	18-62 (27.2)	92% female, 8% male	83% White/European American, 7% Multiracial, 3% Hispanic /Latino/a, 2% Asian, and 1% Black/African American, 4% NR.	NR	Explicit	Examine: who people who self-injure seek help from, how frequently and if it is helpful; supporters roles; differences in NSSI between those who seek help and those who don't; relationships between NSSI and frequency of reaching out, perceive	Ego Quantitative	Role, helpfulness	Online: Survey	Descriptive statistics, ChiSq and t-tests	NR	Number of supporters ranged from 1 to 7 with mean network size 3.16 and mode 2 Friends most represented in the networks followed by therapists. Where someone had a friend in the network, 94% had at least one other supporter. People with family in their network were more likely to also have friends and therapists. Having a friend in the network was related to also having a therapist. Average supporter network helpfulness was negatively related to number of people approached. Teachers/professors were most helpful and family members/parents the least helpful. Those with immediate family in the network had lower overall perceived supporter network helpfulness. People who used more NSSI methods over their lifetime were more likely to have sought help from more people.	Sampling and nonresponse biases that are not explored.

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									d helpfulness and size of network					Frequency of seeking help was negatively related to number of current methods.	

Abbreviations: ChiSq = chi-squared, MH = mental ill-health, NR = not reported, SU = substance use

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Relational influences on help-seeking for mental health and substance use problems among people experiencing social marginalisation: A scoping review

Abstract

Objectives: Establish how social capital theory and social network analysis methods have been applied to understand the relational influences on help-seeking for mental health and substance use problems among people experiencing social marginalisation.

Design: Scoping review

Data sources: EMBASE, Web of Science, Criminal Justice Abstracts, Soc Index

Eligibility criteria: Papers 1) including adults experiencing social marginalisation, and 2) focused on/discussing help-seeking for mental health or substance use problems, and 3) that applied social capital theory or social network analysis methods.

Data extraction and synthesis: We extracted and charted data pertinent to review objectives, and narratively synthesised results.

Results: Twenty-seven papers were included. Most (n=19) focused on the experiences of people who used drugs. Five specifically focused on help-seeking, four of which applied quantitative social network analysis, one was framed by network theories of social capital, and one referred to social capital in interpreting findings. The remaining 22 papers discussed help-seeking whilst focused on different phenomena. Seven of these framed their approach with social capital, but none explicitly applied social capital to help-seeking. Eight papers used social network analysis, with four focused on help-seeking and seven using personal networks.

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Social/relational influences identified included: Fear of losing social capital, the risks of high bonding capital, service providers as social capital, selective help-seeking, trust, and network culture.

Conclusion: Social capital, interconnected with the tight-knit bonds within marginalised groups could deter help-seeking. Knowledge and attitudes towards help and help-seeking shaped by past experiences and network cultures influenced help-seeking and contributed to a cautious and selective approach. Theoretical elaboration and empirical research is required to better appreciate the relational influences on help-seeking for mental health and substance use problems among people experiencing social marginalisation. Social capital may provide a useful theoretical approach and whilst social network analysis methods have been applied, they are under-utilised.

Keywords

Mental health; substance misuse; decision making; social capital; social network analysis, help-seeking

Strengths and limitations of this study

- Applied rigorous scoping review methods and tested a quality appraisal tool on studies using social network analysis
- Identified important relational influences that encourage or deter help-seeking among people experiencing social marginalisation, with implications for intervention planning
- Papers may have been overlooked due to variation in terminology and concepts related to help-seeking
- Studies of other types of social marginalisation, or applying other social theories or research methods were not included

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Introduction

High levels of mental health and substance use problems among socially marginalised groups[1,2] indicate that access to appropriate support and treatment is essential. Whilst evidence-based treatments for mental health (MH) and substance use problems (SU) are available, these are not accessed equitably across populations,[3] suggesting that certain groups experience greater barriers to access than others. When MH/SU are not addressed with effective treatment and support, there is an increased risk a person will reach a point of crisis that brings them to the attention of emergency health and other services. Socially marginalised populations, for example those experiencing homelessness or with justice-involvement in their lives, are disproportionately represented in attendances at emergency services.[4,5] MH/SU is the primary reason for attendance among these groups and a driver of frequent attendance.[5,6]. This high use of emergency and crisis care indicates that people experiencing social marginalisation may face barriers to accessing early and preventative MH/SU services.

Accessing healthcare depends on interrelated demand and supply elements, spanning systemic, social, cultural, and personal factors. Levesque et al.[7] describe five distinct but interrelated components required for access: identifying healthcare needs; seeking healthcare services; reaching healthcare services; using services; and being offered appropriate services. Barriers and facilitators (which may be personal, social, cultural, structural, or organisational) act on different components to affect access, and their impact will differ between people with different characteristics, in different contexts, and when accessing different types of healthcare. For example, among people experiencing justice-involvement, barriers to service access include being unable to register with a general practitioner, stigma within society and services, cost (where health and social care is not funded by general taxation), service fragmentation and frequent change in providers, service designs that do not account for multi-morbidity, and waiting lists.[8–11]

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Help-seeking is a fundamental component of accessing treatment and support. It involves responding to perceived needs by actively seeking assistance, support, or guidance from various sources, including informal networks, community resources, and professional services. Unlike accessing or using services, which involve receiving assistance or treatment, help-seeking encompasses the steps individuals take to identify and reach out for support, regardless of whether they ultimately engage with services. This requires the desire to seek help and the ability to do so.[7] There may be specific social and relational dynamics related to help-seeking for MH/SU compared to help-seeking in general, as the former carry high levels of social stigma. There are differences in MH/SU stigma depending on the nature and severity of someone's presentation (e.g., some mental health conditions are less stigmatised than others, and there are different attitudes and legal approaches towards illicit drugs and alcohol). Additionally, the help-seeking processes may operate differently among people who experience social marginalisation, by the type of marginalisation experienced, and by the context in which they and their relationships are situated.

Research into help-seeking for MH/SU often uses healthcare utilisation rates as a measure of help-seeking, which does not distinguish between the act of seeking help and successfully accessing treatment. For example, in studies of adults experiencing homelessness, authors state they are investigating help-seeking for MH/SU, but measures are of health care utilisation.[12,13] Further exploration is needed into help-seeking specifically among people who experience social inequities, that goes beyond age, gender and ethnicity.[14.]

In this paper we focus on social marginalisation resulting from homelessness, justice involvement, substance use problems and pre-existing mental ill-health because these are core forms of severe and multiple disadvantage and are often experienced together.[9,15] Help-seeking is beginning to be examined among socially marginalised groups. For women experiencing homelessness, help-seeking is impacted by lack of knowledge of what services are available and how to seek them, compounded by competing priorities (such as accommodation loss). Homeless women may hide difficulties from

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authorities who have powers to intervene with their children, and experience exhaustion from navigating the system, leading to giving up.[16] Research into help-seeking among justice-involved people largely attends to the experiences of people in custody, which is a distinct relational environment, where people can be deterred from help-seeking for MH/SU due to a perceived need to project strength, control, and autonomy, in order to retain their status and related safety.[17,18] Among those in prison, negative past experiences can lead to mistrust, a perception help is useless, and fear of further negative experiences.[17,18] Whether these themes would be as apparent when people are released to the community or when serving a community-based sanction is unclear.

Desire and ability to seek help involves personal and relational influences (i.e., influence through and by social relationships), including the attitudes, beliefs, knowledge, norms, and resources in communities and social networks. Existing theoretical models point to the relevance of these relational aspects when applied to help-seeking,[19,20] but these relational aspects remain under-explored compared to individual factors, particularly among people experiencing social marginalisation. This is important when considering the range of relationships people have, and their embeddedness within communities with different cultures and social representations of help-seeking.[7] Further there has been limited application of social theory to explain the relational mechanisms behind help-seeking in populations experiencing social marginalisation,[18,21,22] potentially impacting our ability to understand how and why help-seeking takes the forms it does among those most excluded from communities. Applying social theory to attain a more nuanced understanding of the relational influences on help-seeking for MH/SU for people experiencing social marginalisation is essential given the disproportionate prevalence of MH/SU problems in these populations.

There are competing and overlapping theories that attend to relational influences on human behaviour across disciplines, which vary in the extent to which they focus more on individual or structural influences.[(e.g. 20,23–25)] Social capital theory has rapidly been established as a leading theory. Social capital can be considered as the resources (e.g., information, emotional and tangible support)

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available to an individual through their relationships. Social capital theory explains how the structure and nature of relationships, at a micro (individual), meso (social network), and macro (community/societal) levels, enable or constrain behaviour through access to resources and information, and the sharing of beliefs, attitudes, and cultural norms.[26–28] Social capital has been further elaborated to consist of bonding, bridging, and linking capital. Bonding capital refers to the social capital obtained through relationships within a group, whereas bridging refers to that obtained from relationships between groups.[28,29] Linking capital is conceptualised as social capital obtained from relationships across different levels of a social hierarchy, such as between citizens and institutional providers of services.[30] Social capital theory therefore provides a means to theorise the relational influences upon help-seeking for MH/SU occurring within social networks embedded in communities.

Evidence indicates a positive relationship between social capital and health, although different groups do not always benefit or benefit equally.[31] Social capital can have positive or negative implications for a range of outcomes including health.[32,33] There is a need for greater empirical examination of the mechanisms by which social capital has its effects, and how this may differ among different groups.[31] To maintain good health, the influence of social capital on accessing help at a time of illness, through either facilitating or deterring help-seeking, is one potential mechanism that could contribute to better health outcomes for people experiencing social marginalisation.

If relational influences act through peoples' social networks, empirical research is needed at this level. Social network analysis (SNA) takes an approach to research in which networks are a central concept of interest.[34] SNA is well suited to examining social capital at the 'meso' level, i.e., at the level of networks within communities (with micro representing study of the individual, such as their characteristics, and macro representing wider societal structures, such as law or policy). It presents a means to elucidate the mechanisms by which social capital may affect different outcomes, including help-seeking. SNA includes a range of methods to study structure, composition and dynamics of social

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networks in their situated context.[35] Of the two primary applications of SNA, the first involves analysing personal networks of individuals (egocentric networks or 'egonets') by collecting quantitative and/or qualitative data about a person (ego), others to whom they relate (alters), and how alters relate to one another. The second involves analysing usually quantitative data on a whole network (sociocentric networks) of all people within a bounded community, such as a school, and identifying the connections between them. In both cases ego and alter characteristics can be collected, and the nature of relationships ascribed different attributes (e.g. supportiveness or conflict levels). Analyses can be descriptive, involve identifying patterns in behaviour, or modelling to predict outcomes. SNA has utility for gathering and analysing data to empirically examine the relational influences on help-seeking for MH/SU and the mechanisms by which these operate.

There is limited literature that examines MH/SU help-seeking among people experiencing social marginalisation, especially that which considers relational over individual influences. Better understanding relational influences is essential to inform tailored approaches that enable those experiencing stark health inequities to seek, and ultimately access, help for highly stigmatised health needs. Social capital theorises how and why relationships in social context influence behaviour, indicating its potential utility for understanding influence on help-seeking that goes beyond individual or structural considerations. The growing application of SNA in health research, and its suitability for operationalising and empirically examining social capital, suggests SNA research may highlight key considerations for understanding help-seeking for MH/SU among people experiencing social marginalisation.

The broad academic and practice fields in which social capital and SNA are applied indicates a need for a multidisciplinary synthesis to minimise fragmentation in the evidence base. Using a scoping review, we aimed to establish current knowledge about: the utility of social capital theory to explain the relational influences on help-seeking for MH/SU in people experiencing social marginalisation; and

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how SNA methods have been applied to study relational influences of help-seeking for MH/SU with people experiencing social marginalisation.

Objective

To synthesise the literature applying social capital theory or SNA to understand relational influences on help-seeking for MH/SU among people experiencing social marginalisation.

Questions

1. How have theories of social capital been applied to understand the relational influences on MH/SU help-seeking among people experiencing social marginalisation?
2. How have SNA methods been applied to understand the relational influences on help-seeking for MH/SU among people experiencing social marginalisation, and what methodological insights have been gained?

Methods

We followed established scoping review methods[36,37] and report this using the PRISMA Scoping Review Extension.[38]

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Protocol and registration

We pre-published our protocol on OSF (www.osf.io/nfkmq).

Patient and public involvement statement

This review is part of a larger study informed by a Patient and Public Involvement Group consisting of people with experience of justice-involvement. They have confirmed that understanding how to increase early help-seeking for MH/SU is important, and will advise on dissemination of review findings alongside wider study activities.

Eligibility criteria

We included papers where the population were adults (18+ years) experiencing social marginalisation due to involvement in the criminal justice system (justice-involvement), homelessness, pre-existing mental ill-health, using drugs, problem drinking or gambling. Initial scoping searches identified a very limited literature applying social capital or social network analysis methods to MH/SU help-seeking when only including homelessness or justice-involvement. However, papers examining help-seeking among people who were experiencing marginalisation because of an existing MH or SU problem offered relevant findings, due to the prevalence of these experiences among those experiencing homelessness or justice involvement.[9,15] Eligible papers examined MH/SU help-seeking from any source, and applied either social capital theory or social network analysis. We did not limit context or date, but restricted language to English and our search to peer-reviewed sources.

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Information sources

We searched four databases to identify literature across health, social science, criminology, and criminal justice: Criminal Justice Abstracts, EMBASE, SocINDEX, Web of Science All Databases.

Search strategy

Initial searches for SNA or social capital theory *and* mental health or substance use in Web of Science produced a manageable number of publications for review. We thus proceeded in our full search without using search terms for help-seeking or social marginalisation, allowing us to take a nuanced approach to inclusion that accounted for variation in definitions and terminology. As a scoping review, we did not include an exhaustive range of types of social marginalisation, selecting homelessness and justice-involvement due to their association with multiple disadvantage.[9,15] The review team considered papers carefully for whether the phenomena studied could be interpreted as help-seeking for MH/SU. We determined this to be where a person approached another/others to discuss or disclose MH/SU concerns, or where someone sought advice, support or help related to their MH/SU. We attempted to capture the inverse, where people were 'not help-seeking' by disengaging from or avoiding treatment and support. Consistent with scoping review methods, we did not use every possible term for MH/SU, but selected relevant terms in conversation with a subject librarian that would provide broad coverage.

In each database, we combined search terms for key concepts using Boolean operators. We searched title, abstract, keyword, and where available, subject headings/indexing. In Web of Science, we searched by 'Topic' (title, abstract and keywords). Table 1 shows the template search strategy, with the full search strategies included in the Supplementary File.

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We set up email alerts in Web of Science (which indexed all the included papers and had the largest number of results) to identify new publications as the review progressed until June 2024, reviewed the reference lists of included papers, and met regularly to determine if additional searches were needed, although this was ultimately not required.

Table 1. Template search strategy

Questions	Key concepts	Key search terms
How have theories of social capital been applied to help-seeking for MH/SU among socially marginalised groups?	Social capital theory Social network analysis Mental health Substance use Help-seeking Socially marginalised groups	"Social capital" OR "social network analysis" AND "mental health" or "mental illness" or "psychosis" or "schizophrenia" or "depression" or "anxiety" or "personality disorder" or "eating disorder" or "post traumatic stress disorder" or "suicide" or "suicidal" OR "Substance use" or "substance abuse" or "substance misuse" or "addiction" or "drug dependence" or "alcohol dependence"
What insights have been gained through applying SNA to understand help-seeking for MH/SU in socially marginalised groups?		

Selection of sources of evidence

CC conducted the searches on 26-27th June 2023, imported results into reference management software[39] to remove duplicates, and imported de-duplicated results into Rayyan[40] to facilitate team review. Email alerts for papers meeting our search criteria were checked and reviewed until June 2024 with the intention of adding these as they emerged.

In an initial calibration process, three reviewers (CC, DG, RK) independently screened the same 10% of citations at title and abstract level and discussed results to agree a consistent approach. Following this, the three reviewers screened all papers at title and abstract level with at least two reviewers

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screening each record. We met at the mid- and endpoint of title and abstract screening to discuss inclusions, exclusions, and any areas for additional searches. Disagreements were resolved in three-way discussion, producing a list of papers relevant for full text review.

The three reviewers independently read 10% of papers at full text to determine eligibility for inclusion as an initial calibration process. Following this, all papers were independently screened by at least two reviewers. We again met at the mid- and endpoint to discuss decisions and resolve any conflicts. We intended this stage to be iterative,[37] but did not identify a need for further searches. We checked all references lists of included papers and relevant papers that were outside our scope.

Data charting process and data items

Three reviewers (CC, DG, RK) piloted a data charting template (data items section) before meeting to review the consistency in content and detail of the extracted data. Minor amendments were made to clarify where focus on help-seeking and social capital were explicit or incidental. We included papers that had incidental findings of interest but were not primarily focused on help-seeking/social capital/SNA due to the limited literature. We added extraction of sample size and study aim(s), and streamlined our recording of individual study results. Reviewers divided the remaining papers for data charting, with CC checking all extracts. It was not necessary to contact authors for further details. For each paper we recorded the data detailed in Table 2.

Table 2. Data items extracted

All papers	• Year published • Year data collected • Location and country • Population • Sample size • Socio-demographic characteristics (age, sex/gender, ethnicity, other) • Aim and extent of help-seeking (implicit or explicit)
Social capital papers	• Extent of focus on social capital (explicit or incidental) • Level of social capital discussed (micro, meso, macro)

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	• Types of social capital explored (focusing on bonding, bridging and linking) • Theoretical orientation of the paper • Summary of any theoretical argument relating social capital to help-seeking • Results relevant to help-seeking
SNA papers	• Type of method (quantitative, qualitative, mixed methods) • Social network type (egocentric network/personal network, whole network) • Network features studied (e.g. centrality, homophily) • Data collection and analysis methods, • Findings related to help-seeking or the utility of SNA

Critical appraisal

We anticipated we may find more theoretical papers discussing social capital and because of our methodological focus on SNA, we elected to appraise the quality only of empirical SNA papers. As there are no validated critical appraisal tools for SNA, at least one reviewer appraised the quality of each paper using the Mixed Methods Appraisal Tool (MMAT), selected for its ability to support efficient appraisal of various study types.[41] We were cognisant of potential limitations in elucidating methodological strengths and limitations of SNA designs and in this respect were testing the utility of MMAT for SNA.

Method of synthesis of results

We synthesised the results using data summaries and visualisations, before developing a narrative synthesis addressing each question. For papers discussing social capital we summarised, grouped and compared these according to the number and type of papers, publication dates and rate, and sample, sample demographics, country, focus on mental health or substance use (or both), theorists and types of social capital. For SNA papers, we summarised the number and type of study, sample, sample demographics, country, focus on mental health or substance use (or both), and methods applied.

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These were discussed as a wider team at the midpoint to capture impressions and inform the final synthesis and reporting.

Results

Selection of sources of evidence

We identified and screened 4487 papers at title and abstract level, and reviewed 122 at full text. We included 27 papers. Five were studies focused on help-seeking, of which four were identified in database searches and one from wider reading. The latter had not used 'social network analysis' as a term in full thus not being identified in initial searches (see Figure 1). An additional 22 papers were retained in the review due to incidental references to help-seeking. Whilst help-seeking was not the focus, they provided useful synthesis material to better understand the phenomenon.

Characteristics of sources of evidence

We summarise the characteristics of the included papers here, and present our full data extraction in the supplementary file in Table S1: Social Capital Papers, and Table S2: Social Network Analysis Papers.

Publication date: Papers were published between 2001[42] and 2023.[43–45] There has been a gradual increase in papers published that discuss relational elements of help-seeking for MH/SU among people experiencing social marginalisation (Figure 2), although the vast majority only make incidental references to help-seeking.

Country: High and upper-middle income countries are represented (Figure 3), with the largest number of studies from the USA (n=7). Two literature review papers potentially included participants from

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multiple countries,[46,47] one study was conducted online and therefore could include participants from multiple countries[48] and one did not report the country where data were collected.[49]

Sample size: Sample size varied by study design from seven in the smallest qualitative study[45] to 4211 in a whole network study that took data from internet posts.[48]

Demographics: With the exception of the literature reviews,[46,47] most studies reported age, gender, and ethnicity of their primary participants. Seven studies had a clear majority (over 60%) of men,[42,43,45,50–53] seven had a clear majority of women,[54–60] seven were relatively equally split,[49,61–66] and four did not report sex/gender of the sample.[44,48,67,68]

People aged 16 to 72 are represented. Five papers did not report the age of participants.[44,48,59,67,68] Three papers examined the experiences of a specific ethnic group: African Americans in the USA,[63] Orthodox Jews in Israel,[51] and Roma people in the Czech Republic.[44] Ten papers did not report the proportions of people of different ethnicities whilst the others included mixed ethnicity samples,[43,49,53–56,61,64,67] although for some this mix was minimal.[42,57,60]

Substance use descriptors were frequently provided.[42,45,50,52–54,61,63,66] Fewer papers provided mental health characteristics.[56,58,64]

Type of marginalisation:

Fulginiti et al.[64] and Oliver and Cheff[55] sampled young adults experiencing homelessness. Timmer et al.[47] reviewed the literature on people with multiple disadvantage in contact with the criminal justice system. The remaining papers sampled people whose marginalisation experience was due to mental ill-health (n=5) or drug use (n=19). However, most samples likely experienced multiple types of social marginalisation.

Issue help sought for: Two papers examined disclosing suicidality,[49,64] one focused on approaching people to discuss health in the context of recent onset of mental ill-health,[56] one studied advice-seeking about Buprenorphine for treating opioid dependence,[48] and in line with our intention to

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capture 'not help-seeking', one paper discussed why people disengaged from SU treatment.[53] The remaining papers incidentally reported on help-seeking within the wider findings. No studies used the term help-seeking.

Critical appraisal within sources of evidence

Applying the MMAT[41] to SNA papers provided an initial framework for assessing quality. Whilst this allowed us to identify broad areas of strength and limitations, it provided little direction to the specific considerations for different types of social network studies. The main areas where we identified limitations were in clarity of reporting methods, particularly in how qualitative findings were synthesised and how multiple methods were integrated in a single study to reach conclusions. See Table S2 in the Supplementary File.

Results synthesis

The results of individual sources of evidence are presented in Table S1 and Table S2 in the Supplementary File.

Application of social capital theory

Twenty-three papers referred to social capital. Only two were studies focused on help-seeking,[53,56] of which only Perry and Pescosolido[56] directly applied social capital in their work. The remaining 21 were focused on other phenomena but with incidentally relevant findings.

Most papers were qualitative, with two literature reviews,[46,47] one mixed methods study,[50] and one quantitative study.[56] Eighteen used or described social capital, whilst five only made a short reference to it.[52,54,58,59,66]

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Theoretical orientations

Most papers cited the seminal works of Bourdieu,[26] Coleman,[27] and Putnam.[28] Perry and Pescosolido[56] present the only detailed theoretical argument for the role of social capital in influencing help-seeking, in the context of mental illness, drawing from network theory of social capital[69] and their own previous work.[21,22,70]

Six further studies were framed using social capital theory, as elaborated by a particular theorist/theorist, but only incidentally referred to help-seeking.[50,55,57,63,65,68] Five qualitative papers and one literature review provided a general description of social capital and key theorists in the area without any further framing of their study, and picked up relevant findings in the discussion.[42,51,60–62]

Seven studies[44–46,52,53,58,67] referred to social capital within 'recovery capital', citing the work of Granfield and Cloud.[42,71,72] Recovery capital draws on the work of social capital theorists but is a broader concept for explaining substance use recovery that incorporates personal, physical, and cultural capital. We only included papers that referred to the social capital component of recovery capital. Radcliffe and Stevens[53] discuss reasons for not seeking help (treatment engagement/disengagement), but reference to theory was limited in the findings and discussion. Three papers did not provide a theoretical basis for their references to social capital.[54,59,66]

Forms and levels of social capital

No studies considered bonding, bridging, and linking specifically in relation to help-seeking. Six papers mentioned bonding, bridging and linking in relation to their data.[45,46,50,51,55,61,67] Only Silva et al.[57] explicitly stated the levels of social capital of interest in their study. They considered the micro and macro level, defining these as how individuals interact within groups and as how thoughts and

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behaviours influence network structures respectively. However, they do not apply this explicitly to understanding help-seeking.

Methodological insights gained through applying SNA

Eight papers reported using social network analysis (SNA). Six used quantitative SNA: four focused on help-seeking,[48,49,56,64] of which three adopted multi-level modelling.[49,56,64]. One SNA paper adopted mixed methods,[50] and three used qualitative SNA.[43,57,65] Although two did not use SNA in full, instead using elements of it to guide data collection and coding of qualitative data respectively,[57,65] we have included them here as they engage at the relational level in their data collection and/or analysis.

One study used whole network SNA, taking data from online forums[48] and analysing this statistically. Seven papers used personal network SNA.[43,49,50,56,57,64,65] Three studies involved the completion of a network map during interview.[43,49,50] Analytical approaches in the personal network studies varied, reflecting the different types of data and collection methods.

Conclusions about the utility of SNA from paper authors

Authors considered qualitative SNA to be useful for understanding relationships and their functions,[43] including relationships from which someone could seek help. Network maps were identified as a valued interview tool for achieving more depth in understanding relationships[43] and aiding recall for achieving data completeness.[49]

Multilevel modelling was emphasised for its ability to generate novel findings precluded in traditional statistical analysis, by accounting for the unique contributions of individual characteristics, relationship factors and network features[49,56,64]

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The potential for ego perceptions of alters characteristics and relationship qualities to be subjective was reported as a limitation.[65] However, it could be credibly argued that it is the ego's perception that is of interest in understanding the relational influences upon them.

Results from SNA studies could inform more nuanced network-based interventions that allow for relational level influences on individual behaviour to be considered within the wider social context.[50,65]

Relational influences on help-seeking

Fear of losing social capital

Fear of losing social capital had an important influence on whether to initially seek help, and continue to do so. People feared that being seen to be associated with a drug using community, which would be highlighted by attending treatment, could result in a loss of conventional social capital given the associated stigma.[53,66] In contrast, being known to have engaged with treatment or to have tried to move away from substance use could risk the loss of alternative forms of social capital that marginalised communities depended heavily upon. For example, losing the status that can be attained in the drug using community[53] or the protection and employment offered by drug gangs[54] may disincentivise help-seeking.

Risks of high bonding capital

A consistent theme was the risk that high bonding capital (where people in a community are well connected to one another), in the absence of bridging and linking capital, could limit the ability to attain knowledge about resources and opportunities to seek help.[45–47,50,61] Bonding capital may be beneficial for help-seeking where relationships are with people perceived as likely to be helpful or who encourage help-seeking. However, high bonding capital could also deter help-seeking where

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there are strong norms around abstinence. For example, that a person may feel they cannot or do not want to attain abstinence, or where there is a risk of rejection if someone experiences a relapse.[45,50] High bonding capital within tightknit communities where there is ignorance, stigma, and reluctance to acknowledge substance use could be equally restrictive,[44,51] as well as where there is strong bonding capital connected to substance use.[53,54] Most papers exploring this phenomenon were among people who use drugs. However, among those with people with mental illness, a small number of people with relationships characterised by closeness, kinship or partner roles were most likely to be approached,[56] indicating that bonding capital is still important.

Service providers as social capital sources

Service providers were seen as a source of bonding, bridging, and linking capital. Service providers were sometimes the only sources of bridging and linking capital in peoples' lives and vital for accessing support and sustaining engagement with it.[45,52,55,61] Service-facilitated opportunities to develop bonding capital with other people experiencing social marginalisation was sometimes valued.[61] However, sometimes this was not achieved, or was not desired by participants, for example where they did not see value in building relationships with others struggling with their own difficulties.[52,53,62]

Selectivity/Preferred sources of help

People selectively seek help from others when their relationships are characterised by care, helpfulness and support, availability, closeness, commitment, trust, and companionship.[43,49,56,57,64,65] This selectivity is evident in that people only approach a subset of alters for help.[49,56,64] Among adults with mental ill-health, disclosing suicidality or seeking health-related discussions with particular alters were associated with alter age, having previously disclosed to that alter, relationship type, closeness, social support provided in that relationship, and shared experience of mental ill-health.[49,56] Previous

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social support was associated with disclosure of suicidal thoughts to particular friends among young adults experiencing homelessness, both historically and at the time of experiencing suicidality.[64] Among people accessing mental health services, the people to whom someone had disclosed and intended to disclose to differed.[49] This suggests that experiences of help-seeking from particular alters (below) may inform selectivity around who is approached in the future.

There are contrasting findings across studies about the roles of alters (e.g. family, friend, service provider) from whom people seek support. Among people with mental ill-health, Amadei et al.[43] found family were most commonly approached, with professional service relationships of secondary importance. Perry and Pescosolido[56] refine family further, identifying that mother and partner were most likely to be approached, with professional services equally as likely to be approached as neighbours, siblings, friends, and fathers. Young adults experiencing homelessness were more likely to approach friends,[55] and homeless adults using crack cocaine preferred specialist services and used emergency care.[57] Peer/mutual support was viewed positively for some people seeking MH/SU support, describing these as relationships and communities that embodied care and belonging.[43,50] This was supported by findings that alters who shared an experience of mental illness had significantly increased odds of being approached for help.[56] However, it is first essential to know who and where peers are, and maintain good relationships with peer leaders to avoid ostracism,[66] again highlighting a risk in strong bonding social capital. There was an intersection between friends and professional service providers, with friendship sometimes attributed to professionals, including religious leaders,[43] raising the issue of defining roles clearly in network studies.

Irrespective of role, alters were only approached when they were anticipated to be understanding and honest.[42,52,62] Further, some participants were concerned about burdening friends/family[42,62] or not wanting to be seen to complain.[60] Support can be vulnerable to change when the person/people providing support also experience social marginalisation and have limited resources of their own.[60]

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Further, family and friends could be actively unhelpful, with professional services expertise being preferred.[55,57,58]

Trust

Only Perry and Pescosolido[56] discussed trust held within the network, in line with considering this as a resource. They showed a greater likelihood of an alter being approached to discuss health matters where network level trust in physicians is higher. All other studies reflected an understanding of trust as either something held by the ego, or in some cases as a property of an alter/relationship. Previous help-seeking experiences impacted upon trust that other people were likely to be helpful, which influenced future help-seeking attempts.[50,51,55,57,62,66] This may explain quantitative SNA results, which demonstrated selectivity and change in who was approached for help at different time points.[49,56] Past negative experiences, harms or neglect by authority figures generally,[51,55,60] and service providers specifically,[50,57,62,66] could erode trust in relationships in general, as well as in specific relationships, and deter future help-seeking. For young people this contributed to a desire to prove they did not need support, or could live without it, presenting a psychological barrier to seeking help if and when needed.[55] Whilst the absence of trust could be a barrier, Kirst[65] and Oliver and Cheff[55] highlight the importance of trust and companionship in relationships for enabling someone to access resources mediated by relationships with peers and service providers. Palombi et al.[67] noted that hoping that help will be effective plays an important role, alongside fear of what a response may be, reflecting the concept of trust in relationships.

Network culture

The importance of network culture and its influence over time on forming norms, beliefs and attitudes towards help-seeking across a community has received limited specific empirical examination in

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marginalised groups. Over and above the characteristics of egos and alters, the average level of pro-health care attitudes across a social network, indicative of network culture, is associated with help-seeking in the context of mental illness.[56] The potential impact of tensions between different cultural norms within one person's network is illustrated with an example from Chile where Mapuche people could be encouraged or discouraged to go to psychiatric or Machi healers by different members of their community.[68]

Societal level influences

Structural barriers to accruing social capital and influencing help-seeking were discussed to a very limited extent. Stigma, drug laws, and policy that fail to recognise opportunities for harm reduction, and wider structures that embed social marginalisation on the basis of ethnicity, gender, sexual orientation and gender identity were all mentioned, but with limited elaboration of their relevance to help-seeking.[47,59,65] African Americans may face additional barriers to help-seeking in the USA because their ethnicity places them in a position of lesser power[47,63] resulting in a lack of social capital that would enable access to resources and information to facilitate help-seeking.[47]

Discussion

This review presents a summary and synthesis of current knowledge, across diverse disciplines, of the relational influences on help-seeking for mental ill-health and substance use among people experiencing social marginalisation. Specifically, we examined applications of social capital theory and social network analysis.

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Summary of evidence

There is limited literature that uses social capital theory or social network analysis to examine relational influences on help-seeking for MH/SU among people experiencing social marginalisation. We identified few studies that sampled people experiencing homelessness,[55,57,64] and the only paper discussing justice-involved people was a literature review.[47] In the few studies explicitly focused on help-seeking, the term 'help-seeking' was not widely used. This may have implications for future reviews attempting to examine help-seeking for MH/SU or other needs, potentially resulting in few results. A-priori theorisation and decisions about what the review team considers 'help-seeking' will be beneficial.

High bonding capital among people experiencing social marginalisation to others within minority communities, in the absence of bridging and linking capital, could deter help-seeking for MH/SU. This extends the evidence on the health risks of high bonding capital[31,33] by highlighting that deterrence of help-seeking may be a mechanism by which social capital effects health. We noted two ways in which this mechanism may operate. Firstly, help-seeking may present a risk of losing social capital in networks and communities where norms or culture do not support engaging with authoritative structures, or where there is stigma towards people who have mental ill-health or substance use problems, thus deterring help-seeking. Perceived stigma toward people in need of help, translating into internalised stigma, has been shown to negatively influence mental health help-seeking.[73] Whilst the risk of losing social capital also applies to people who possess high levels of bridging and linking capital, arguably the risk is more pronounced for people who rely on being part of a close-knit community. Secondly, an absence of linking and bridging capital can reduce access to varied information[74] about when help can and should be sought, what is available, and how this might be experienced, leaving people without the information needed to decide to seek help.

Viewing social capital as the sum of resources within a network, having lower bridging and linking social capital could indicate a network holds fewer resources, and thus influences people to make

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deliberate decisions about from whom to seek help. There were references to both seeking out friends and family, and avoidance of doing so where people were conscious of not burdening others with limited resources. This is in contrast to evidence that people make greater use of weak ties and avoid stronger ties when disclosing sensitive personal circumstances,[75] However, Small's conclusions were developed from studies with people with a greater degree of social integration (university students), who may have greater access to weak ties through their social positionality, and did not examine highly stigmatised issues. Findings from our review indicate that relationship qualities, including closeness may be particularly important for sensitive and highly stigmatised illness such as mental ill-health and substance use among people experiencing social marginalisation. The small volume of evidence identified in this review limits our ability to draw firm conclusions, and the importance of tie strength may warrant greater exploration in populations where there are low levels of bridging capital.

Selectivity about from whom help is sought was clear, with preferences about alters social roles varying between studies.[49,56,64] However, relationship qualities were more important than alters' respective roles. Specifically, those relationships characterised as caring and perceived as likely to be helpful were the ones that were approached. Further, alters that participants did or would approach changed over time, reflecting the influence of past experience on where, when and from whom someone may seek help. This contrasts with less deliberative approaches to help-seeking for lower-level concerns among students[75,76] and is more consistent with theories that help-seeking is a socially influenced, but still deliberative, action.[21,22]

Qualitative studies showed that at times, participants characterised professionals as friends, highlighting a need for a clear understanding of how people define the roles of alters in their networks, especially when measuring this in quantitative approaches. In the quantitative analyses, variables associated with help-seeking were identified, with some conflicting results. More studies that account for different experiences of marginalisation in different contexts but using the same operationalisation

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of variables could assist in furthering understanding the relational influences on help-seeking and the best ways to apply social capital and social network analysis to study these.

Trust is debated by social capital theorists regarding whether it is characteristic of relationships or a more generalised community-level asset, and whether it contributes to, results from, or is integral to social capital.[77–80] Trust is an important relationship quality that enables access to social capital, and network levels of trust in practitioners were associated with help-seeking. Mistrust of authoritative services is a well-elucidated cultural norm within some communities that deters help-seeking, e.g. among people in prison[17] and women who use drugs.[81] Trust in health care providers at an individual level varies across communities, partly explained by levels of community trust and community social capital.[82] The importance of network (and community) culture and attitudes towards different sources of support has received little examination in groups who experience marginalisation by some communities/social groups, but who have strong bonding capital in communities sharing their marginalisation experience, although is starting to be recognised in some contexts.[44]

Structural factors were considered to a limited extent (e.g., law and policy that fails to allow for harm reduction opportunities, sociodemographic characteristics). Future research that elaborates exactly how these macro factors influence help-seeking for MH/SU among people experiencing social marginalisation is required, particularly accounting for the intersecting experiences that further compounds disadvantage.[83] Better understanding structural influences can inform and enhance the impact of 'Inclusion Health' policies and practice[84] to assist those in greatest need of MH/SU support.

SNA methods present a useful means of empirically examining help-seeking among people experiencing social marginalisation, through use of visual network mapping, the application of multi-level models, and its potential for informing intervention development. Although SNA in health and social care research is increasing, the limitations in the wider evidence base are evident here in relation to help-seeking for MH/SU for people experiencing social marginalisation, including the need to better understand relational influences on health-related behaviour, the mechanisms by which

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social networks have their effects, and greater use of longitudinal data to understand change over time.[85]

Limitations of the included studies

No studies used the term help-seeking specifically. For relevant papers to be identified for future reviews, authors of primary research may consider adopting consistent terminology or including help-seeking as a key word.

We only quality appraised SNA studies and did not exclude papers on quality grounds. Our main observation was limitations in the clarity of reporting, particularly in how qualitative SNA findings were synthesised and where multiple methods were combined in a single paper. We included 27 papers and provide a broad overview of how social capital and SNA are applied, thus our findings can be read with sufficient confidence for that purpose. Our synthesis of findings from the social capital studies should be interpreted with awareness that these papers were not quality appraised.

Most papers included participants who used drugs and several included participants experiencing mental health challenges. Although homelessness, sex work, justice-involvement and poverty were all represented, and there are significant overlaps between populations, there is clearly a need for research that examines the unique relational dynamics influencing help-seeking when people experience social marginalisation due to different and multiple experiences. Core demographics were not or could not be reported for some studies. Reporting precise sample demographics and characteristics is essential for future reviews that seek to take account of the intersecting experiences of social marginalisation including intersections between age, sex/gender, ethnicity or sexual orientation.

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Limitations of the review

We conducted the review using rigorous methods, pre-publishing our protocol and adopting PRISMA reporting standards. We searched in English and excluded papers where the full text was unavailable in English. This may have resulted in relevant literature in other languages being overlooked, particularly in non-Western contexts. We nonetheless identified studies from countries with different social and cultural dynamics, across five continents.

Whilst we focused on selected marginalisation experiences, there are likely to be implications for other populations, such as those marginalised by poverty or long-term unemployment, from minority ethnic groups, diverse sexual orientations, or different gender identities. However, the distinct relational influences on MH/SU help-seeking in each of these groups and others should be examined.

Whilst scoping reviews often omit quality appraisal, we appraised SNA studies. It was possible to use MMAT, but it lacked detail for the interrogation of SNA elements. Development of a bespoke tool that can be used for studies adopting this method may be beneficial.

Not all full texts were screened by two independent reviewers as originally intended. At initial and interim team meetings, we determined that the level of consistency achieved between reviewers was sufficient to allow a single review of remaining papers. Additionally, extraction and synthesis were conducted by a single reviewer. Two reviewers at each stage may have added further rigour to the review.

Social capital is not the only social theory that may be relevant, and SNA is not the only way to study it. Future reviews could assess how other theoretical or methodological approaches have been applied to understand the relational influences on help-seeking for MH/SU among people experiencing social marginalisation.

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Conclusion

Social capital can be useful in understanding the relational influences on help-seeking for mental ill-health and substance use among people experiencing social marginalisation, and social network analysis presents a useful method for examining social capital across the networks of people experiencing social marginalisation. Further theoretical elaboration and empirical work is needed, particularly to test whether aspects of social capital influence help-seeking, and whether this mediates or moderates health outcomes. Future work should take account of shared and distinct phenomena across different experiences of social marginalisation, to strengthen the conclusions that can be drawn and thus inform policy, practice and intervention development.

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Figures

Figure 1. PRISMA flow diagram

Figure 2: Numbers of papers published per year

Figure 3. Countries represented in included studies

Contributors

CC conducted conceptualisation, methodology, data curation, original drafting, visualisation, supervision, project administration and is guarantor. CC, DG, and RK conducted investigation and

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As a literature review, ethical approval was not required.

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Competing interests statement

CC, RK and JG are employed at the Salvation Army Centre for Addiction Services and Research (SACASR), University of Stirling. SACASR receives funding from The Salvation Army. The Salvation Army have no involvement or influence on this research. All other authors have no competing interest to declare.

Data sharing statement

Data are available in the online supplementary file. Any further details are available from the corresponding author on reasonable request.

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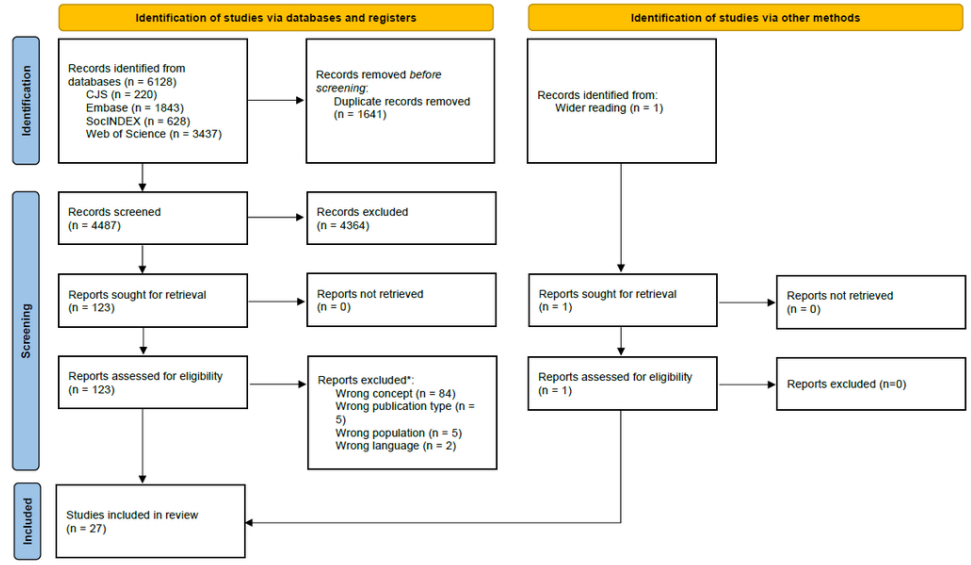

Figure 1. PRISMA flow diagram

228x149mm (118 x 118 DPI)

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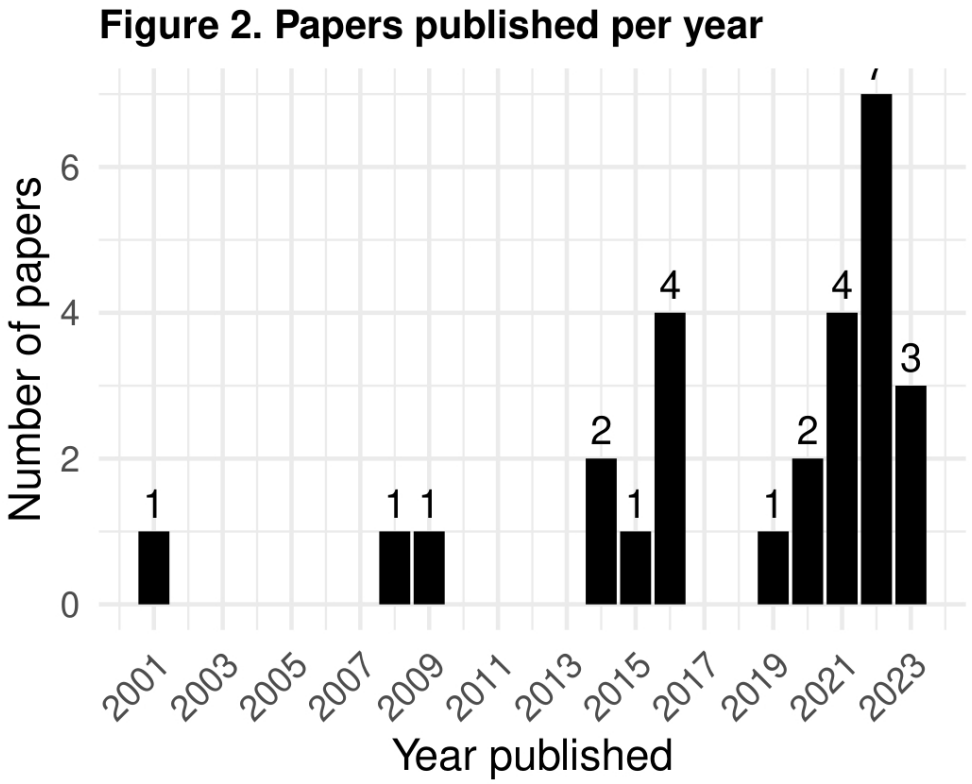

Figure 2. Papers published per year

707x574mm (38 x 38 DPI)

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Figure 3. Countries represented in included papers

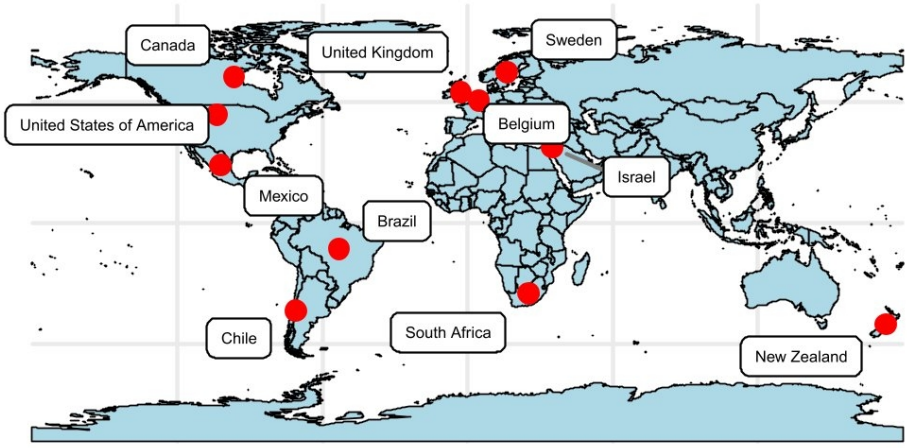

Figure 3. Countries represented in included papers

89x72mm (300 x 300 DPI)

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Supplementary file

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Search strategies

Criminal Justice Abstracts via EBSCO Host

#	Query	Limiters/Expanders	Results
S3	(S1 AND S2)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	220
S2	TI (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR SU (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR AB (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR KW (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	86,290

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S1	TI ("social network analysis" or "social capital") OR SU ("social network analysis" or "social capital") OR AB ("social network analysis" or "social capital") OR KW ("social network analysis" or "social capital")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,138

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EMBASE via OVID

Embase <1974 to 2023 June 26>

1	social capital.mp. or social capital/	6193
2	social network analysis.mp. or social network analysis/	3001
3	"substance use".mp. or "substance use"/	70073
4	"substance abuse".mp. or substance abuse/	76105
5	drug misuse/ or substance misuse.mp.	13383
6	addiction/ or addiction.mp.	153427
7	drug dependence.mp. or drug dependence/	78207
8	alcohol dependence.mp. or alcoholism/	133979
9	mental health.mp. or mental health/	401346
10	mental illness.mp. or mental disease/	293832
11	psychosis/ or psychosis.mp.	149976
12	schizophrenia.mp. or schizophrenia/	234078
13	depression/ or depression.mp.	852167
14	anxiety/ or anxiety.mp.	494771
15	"personality disorder".mp. or personality disorder/	54470
16	"eating disorder".mp. or eating disorder/	41607
17	post traumatic stress disorder.mp. or posttraumatic stress disorder/	83078
18	suicidal ideation/ or suicide/ or suicidal behavior/	102925
19	suicid*.mp.	161363
20	1 or 2	9129
21	3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19	2116872
22	20 and 21	1843

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SocINDEX via EBSCO Host

#	Query	Limiters/Expanders	Results
S3	(S1 AND S2)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	628
S2	TI (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR AB (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR KW (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR SU (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	181,460
S1	TI ("social network analysis" or "social capital") OR AB ("social network analysis" or "social capital") OR KW ("social network analysis" or "social capital") OR SU ("social network analysis" or "social capital")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	11,717

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Web of Science

TS=(“Social capital” OR “social network analysis”)

AND

TS=(“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”)

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Table S1: Social capital papers

STUDY INFO								HELP SEEKING	HOW SOCIAL CAPITAL THEORY IS APPLIED					
First Author	Country	Population	Sample size	Age range (mean)	Sex/ gender	Ethnicity	Other	Help-seeking focus	Aim	Focus on social capital	Level studied (micro/meso/ macro)	Type studied	Theorists	Results relevant to help-seeking
Anderson et al. (2021)	UK (Scotland)	SU: peer-workers	10	Range 31-53 (median 41)	100% male	NR	Time in recovery, peer worker status	Incidental	Increase understanding of recovery capital and social identity using mixed methods social network analysis	Explicit	Terms not used	Explicit: Bonding and bridging	Framing: Putnam Cite: Network scientists	High bonding social capital within both drug using and recovery networks. Many participants were previously unsuccessful in accessing SU support, at a time when their networks were more characterised by bonding capital with other people who used drugs/alcohol (link to help-seeking not explicit). Some sought the stability of addiction services whilst others viewed services as unhelpful (due to limited opening, a perception that they were 'ticking boxes', and offering unwanted solutions).
Boeri et al. (2016)	USA	SU: Active and former drug users	29	Reported as age bands: 18-29 and 30+	48% female, 52% male	66% White, 31% African American, 3% Hispanic	Using 'hard drugs'.	Incidental	Understand how people with problematic drug use and low-socioeconomic status access social networks to gain positive social capital over the life course	Explicit	Terms not used	Explicit	Framing: None Cite: Bourdieu & others	Limitations in treatment programs in providing wider bridging and linking social capital. This may reduce their impact and attractiveness to people to sustain engagement. By encouraging the sharing of experiences, and facilitating bonding social capital, they could sustain engagement. Family and friends were important sources from which to seek informal help, but without providing bridging/linking social capital, the impact of treatment could be short-lived.
Brookfield et al. (2019)	Lit review	SU: Methamphetamine users	NA	NA	NA	NA	NA	Incidental	Understand how to tailor support for methamphetamine users through meta-ethnography of experiences of cessation, recovery, and relapse	Explicit	Terms not used	Explicit: Bonding and bridging	Framing: none. Cite: Granfield & Cloud	Potential for strong bonding social capital acting as a constraint on actions for change and risking contagion of unhelpful behaviours. Social capital determines the options available to people using drugs, including access to support, information, guidance and resources. Social capital is not static.
Brown & Baker (2020)	UK (England)	MH: People who have received treatment	32	22-67 (NR)	47% female, 53 % male	NR	Occupational background, welfare benefit receipt,	Incidental	Explore recovery experiences beyond health and social care or focussed on symptom management	Explicit	Terms not used	Terms not used	Framing: none Cite: Bourdieu & others	By engaging in activities that consolidated a more rounded identity, people accessed and provided support in natural contexts. This was more attractive than seeking professional help, which some reported finding paternalistic or unhelpful. Participants noted that available friends and family was a privilege not shared by all. They made strategic choices about from whom and when they sought help to avoid 'bothering people too heavily'.
Cheney et al. (2016)	USA	SU: People using and not in treatment.	51	18-61 (36.1)	47% female, 53 % male	100% African American	Previously received treatment	Incidental	Understand how lifestyle and social network changes facilitate access to social capital needed to change cocaine use patterns, by exploring factors underlying African American cocaine	Explicit	Terms not used	Terms not used	Framing: Bourdieu	African Americans, particularly outside urban conurbations, experience personal, cultural, and structural barriers to accessing help and may rely on existing personal networks for help to a larger extent. They relate this to Bourdieu's ideas around the struggle for power, and their position in society that limits access to conventional social capital.

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									users' decisions to reduce or quit cocaine use				
Granfield & Cloud (2001)	USA	SU: People dependent on drugs/alcohol	46	Range NR (38.4)	40% female, 60% male	96% White	Addiction length, time in recovery, class backgrounds	Incidental	Examination role of social capital in self-recovery from alcohol- and drug-use problems	Explicit	Terms not used	Terms not used	Framing: none Cite: Bourdieu, Coleman, Putnam & others
Itzhaki-Braun & Gavriel-Fried (2022)	Israel	SU: People who formerly used drugs	14	21-45 (26.9)	100% male	100% Ultraorthodox jews	Addiction length, time in remission	Incidental	Understanding pathways of ultraorthodox Jews into and out of SU	Explicit	Terms not used	Explicit bonding (minor reference)	Framing: none Cite: Coleman, Putnam & others
Kirst (2009)	Canada	SU: people who use drugs	80	Range NR (42)	48% female, 52% male	NR	Income, education level	Incidental	Understand how social capital can influence risk and health behaviours of people who inject drugs and smoke crack	Explicit	Terms not used	Terms not used	Framing: Coleman Cite: Bourdieu, Putnam & others
Myers et al (2016)	South Africa	SU: alcohol and drug users	23 AOD users, 14 SPs	16-21 (18.7)	AOD users: 100% women. SPs: 64% female, 36% male	AOD users: 52% Black African, 48% 'coloured'	Marital status, employment status education level, weekly polysubstance use SPs: 5 health, 4 social welfare, 4 AOD treatment, 1 law enforcement	Incidental	Understand how the environment of poor young women who use alcohol or drugs informs access to and use of health services	Incidental	Terms not used	Terms not used	Framing: none Cite: none
Oliver & Cheff (2014)	Canada	SU: homeless young women	8	15-21 (18.4)	100% women	25% Caucasian, 13% West Indian, 13% South Asian, 13% Ojibwe, 13% Native Canadia	Sexual orientation, education level	Incidental	Explore how young women experiencing homelessness form attachments and accrue social capital outside of the nuclear family unit	Explicit	Terms not used	Explicit all	Framing: Putnam Cite: youth theorists

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						n, 13% Congolese, 13% Metis,								
Ondrasek et al. (2023)	Czech Republic	SU: Roma people	8	NR	NR	100% Roma	NR	Incidental	Explain high rates of self-recovery among Roma people who use drugs, within the socio-cultural context	Explicit	Terms not used	Terms not used	Framing: none Cite: Granfield & Cloud	Cultural norms in the minority Roma community in the Czech Republic can prevent help-seeking. Norms include more acceptance of SU, little interest in treatment services, less knowledge about safe and unsafe SU, mistrust of majority institutions and concerns about risk of losing contact with family. Often SU, when it reaches a level perceived as problematic by the community, collective decisions to intervene are made. Intervention is imposed, using the strong bonding capital within the community to coerce and monitor behavioural change.
Palombi et al. (2022)	USA	SU: people in recovery	64	NR	NR	Over 85% white (only focus group level data given)	Drug court participation, city/township population, household income	Incidental	Examining the construct of social capital for people in short- and long-term recovery from substance use problems living in rural communities	Explicit	Terms not used	Explicit	Framing: None. Cite: Granfield & Cloud	Participants held hope for help working, but fears about what a response may be that could prevent them seeking it. Some people initially mandated to attend could come to an appreciation of being held to account. Others were encouraged by a partner to seek help.
Perry & Pescosolido (2015)	USA	MH: People with a recent onset of mental illness	171	16-72 (30.6)	64% women	73% White, 27% Black	Diagnosis, psychiatric symptoms, education, living situation, employment status	Explicit	Examining factors associated with activating social toes for health-related discussion	Implicit	Terms not used	Terms not used	Framing: Lin (not explicit). Cite: others	Regular interaction partners = mean 15.5. Network partners with whom health issues are discussed = mean 3. Sample mostly had close ties (mean 2.64/3) with moderately high trust in physicians (mean 2.34/3). 20% of all alters are selected as health discussants suggesting selectivity. Ego age and higher levels of psychiatric symptoms associated with increased odds of health discussion. Among alters, age, having a mental illness and having first suggested seeking help were associated with increased odds of health discussion. Relationships characterised by closeness and frequent contact more likely to be activated, those with conflict/hassles/problems less likely. Mother and health professional more likely to be approached than friend or partner. A child or co-worker less likely than a friend. Greatest likelihood of approach is mother or partner. Health professional no more likely that father, sibling, friend or neighbour. Alters in larger networks less likely to be approached. Networks with higher levels of physician trust had greater odds of seeking help.
Pouille et al. (2021)	Belgium	SU: People in recovery - migrants and ethnic minorities	34	18-60 (38)	12% women, 78% male	Ethnicity NR (country of origin)	Range of substances, migrant generation	Incidental	Explore experiences of migrant sand ethnic minorities in recovery from problem substance use; personal, social, and community recovery resources that facilitate	Incidental	Terms not used	Terms not used	Framing: Granfield & Cloud	Participants described the people they could count on for help as understanding and honest, and it was these family members, partners, friends and peers they turned to. Some participants sought help from a religious deity. Participants described avoiding services when they thought there would be easily available substances, and some only made contact through an existing service.

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									recovery; and elucidate barriers to recovery				
Radcliffe & Stevens (2008)	UK (England)	SU: people who dropped out of treatment and service providers	53 drug users, 14 treatment staff	19-50 (Mean NR)	26% women, 74% men	75% White British, 8% Black British, 9% Mixed Heritage, 2% Asian British, 2% Traveller	Receipt of welfare benefits, employment status, time in prison for drug-related offences, drug treatment services mandated by court order.	Explicit	Exploring the relationship between shame and stigma, and engaging in treatment services	Explicit	Terms not used	Terms not used	Framing: none Cite: Granfield & Cloud	Treatment regimes risked exposing drug user status to others, thus threatening loss of social capital. Fear of losing social capital contributed to disengagement from treatment as heroin use allowed greater concealment and flexibility. Engaging with treatment tarnished the participants' sense of identity, associating them with 'other' drug users. This also risked their social capital, regardless of how much conventional social capital they had. Social capital exists among the drug using community. Participants expressed ambivalence towards this, but sustaining this social capital could conflict with treatment engagement. Service providers identified that status and identity associated with drug use was a draw to people with few other avenues to accrue social capital, and which could prompt disengagement.
Rijnink et al. (2022)	Aotearoa New Zealand	SU: people who inject drugs	13 PWID 1 staff member	30-51 (mean NR)	43% female, 57% male	NR	Opioid substitution therapy status	Incidental	Explore experiences of people who inject drugs who rely on a needle exchange mobile outreach service	Incidental	Terms not used	NA (incidental social capital only)	Framing: none Cite: none	In disaster and emergency situations there may be a perception, or reality, that help for SU is not there to ask for. Participants described needing to know who key peer contacts were and that they could help, and the importance of keeping good relations so that they did not lose out when others were favoured. Barriers to seeking help were the judgement experienced and fear of reporting by pharmacy staff, and the need to protect one's identity and social status by not being seen accessing support.
Silva et al. (2021)	Brazil	SU: Homeless people who use crack cocaine	17 SUs, 4 staff (+ethnography)	22-53 (mean NR)	65% female, 35% male	94% Black or Brown	Monthly income	Incidental	Analyse characteristics of social support networks of individuals who used crack cocaine and supported by a Brazilian health program for people living on the street	Explicit	Explicit: Micro/macro	Terms not used	Framing: Lin Cite: Lin	Participants looked for help from specialist providers over psychiatric or family support. The important characteristics were friendliness. They also relied on emergency services.
Skogens & von grief (2020)	Sweden	SU: young adults post treatment	21	25-33 (29)	76% female, 24% male	NR	MH problems, relationship status	Incidental	Examine how recovery over five years was related to former alcohol and drug problems, other problems and processes of change	Incidental	Terms not used	NA (incidental social capital only)	Framing: Granfield & Cloud. Cite: Bourdieu & others.	Through engaging in treatment to resolve SU, some participants identified unmet MH needs. Recognition of previously obscured or un-acknowledge mental ill-health led to seeking MH support. Participants wanted to be taken seriously by people with MH expertise, seeking support outside the SU recovery community. The support most often desired was more 'ordinary' life support, that could be filled through social capital.
Smith et al. (2023)	UK (England)	SU: patients in harm reduction service	7	Early 20s to late 40s	29% female, 71% male	NR	Peer mentor status, time in recovery services	Incidental	Explore experience of recovery from problem substance using captured images and descriptions	Explicit	Terms not used	Explicit: Bonding and bridging	Framing: none Cite: Granfield & Cloud	Participants described isolation from potential sources of support, feeling alienated from any source of community or trusted confidents they could ask for help. Some experienced relief from 12-step-commuities where they could identify with others. Fear of relapse motivated continued engagement. Others expressed reluctance to reach out to people experiencing SU, and could experience alienation and exclusivity in 12-step

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														communities if they could not relate to the group. As they were already using services, workers encouraged help-seeking for other issues.
Timmer et al. (2022)	Literatur e review	People experiencin g multiple disadvantag e	NA	NA	NA	NA	NA	Incidental	Develop an integrated theory of health care utilisation for justice involved people experiencing multiple disadvantage	Explicit	Terms not used	Terms not used	Framing: none Cite: Lin, Bourdieu , Putnam	Argues that people released from custody (and experiencing multiple disadvantage) possess limited social capital and thus may lack knowledge about, and ability to navigate, the healthcare landscape to access care. This is exacerbated for racialised groups and potentially other minoritised identities, because of the intersectional disadvantages that impact accrual of social capital. They draw on a range of literature to propose this hypothesis and argue for the need for further testing of this model. They highlight the potentially reduced network size and thus fewer people to ask for support, return to areas where resources are limited, and stigma and racial discrimination as barriers.
Urada et al (2021)	Mexico	SU: female sex workers	195 for quantit ative part. Intervi ews with 16 profes sionals . Focus groups with 45 women	NR	100% Female	NR	NR	Incidental	Understand if assets-based community developments make a difference to the lives of sex workers.	Incidental	Terms not used	NA (incidental social capital only)	Framing: none Cite: none	Government providers present a negative view of the potential for help-seeking among women who use drugs, suggesting that people don't ask for help with SU, that they don't want help, and that they know and are fearful of societal rejection that can lead them to avoid going out. Potential of community empowerment initiatives to facilitate building of social capital in under-served areas or for people experiencing marginalisation.
Wienck e (2022)	Chile	MH: patients, and their relatives, neighbours, Mapuche healers, and psychiatric staff	27	NR	NR	NR	NR	Incidental	Learn about how social capital impacts people in mental health treatment	Explicit	Terms not used	Terms not used	Framing: Putnam Cite: Putnam	There are conflicts between the psychiatric and traditional approaches with churches having a strong influence and some churches actively discouraging consultation of traditional healers (machis). Although staff thought confusion may be a barrier, this was not seen patient interviews. In one example case, the person seeks help first from the machis in line with his beliefs, before family members enforced a psychiatric consultation. Other patients experienced pressure to stop accessing machi.
Woodall & Boeri (2014)	USA	SU: women who use/formerl y used methamphe tamine	30	19-51 (mean NR)	100% Female	87% White, 7% Latino, 3% African America n, 3% America n Indian	Income, employmen t status	Incidental	Examine how low-income women using methamphetamine the suburbs access resources, and how resources and networks impacts choices and outcomes	Explicit	Terms not used	Cited but not used	Framing: none. Cite: Bourdieu , Coleman , Putnam & others	For some women, seeking help relied on the material and practical support of others. This could be from people with their own difficulties, or a single person, that left a woman vulnerable should the relationship change. Women stopped looking for help after attempts had been unsuccessful. They grew used to having needs met in other places, which may or may not be healthy options. There was reluctance to talk about failed access attempts or lack of resources for fear of being seen to complain.

Abbreviations: AOD = alcohol or drugs, MH = mental ill-health, NR = not reported, SPs = service providers, SU = substance use

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Table S2: Social network analysis papers

STUDY INFORMATION								HELP-SEEKING	INSIGHTS GAINED THROUGH SNA							QUALITY
Reference	**Country**	**Population**	**Sample size**	**Age range (mean)**	**Sex/gender**	**Ethnicity**	**Other**	**Help-seeking focus**	**Aim**	**SNA type**	**Network features**	**Data collection**	**Data analysis**	**Results relevant to methods**	**Result relevant to help-seeking**	**MMAT**
Amadei et al. (2023)	Brazil	MH: Patients	16	22-59 (44)	38% female, 62% male	81% white, 13% brown, 6% black	Marital status, living arrangements, religion	Incidental	Analyse the structural characteristics, functions and attributes of the bonds in the users of the psychosocial care centre	Personal network Qualitative	Size Density Homophily Alters role Tie function	In person: Interview and network maps. File reviews. Institutional record review	Merging of network maps	SNA useful for understanding relationships and their functions (inc. help-seeking). Co-producing network maps a useful strategy.	People sought out relationships characterised by care, help, support, availability and commitment. Family were most commonly approached with professional service relationships second. Community mutual support was viewed positively, though not explicitly for MH support. They were experienced as places of care and belonging. There was an intersection between friends and service providers, with friendship sometimes attributed to professionals/religious leaders.	Lacks clarity in reporting analysis and how the qualitative data were integrated with the maps at individual and group level.
Anderson et al. (2021)	UK (Scotland)	SU: peer-workers	10	Range 31-53 (median 41)	100% male	NR	Time in recovery, peer worker status	Incidental	To expand the conception of recovery capital and social identity	Personal networks Mixed methods	Size. Density. Closeness. Homophily. Constraint. Transitivity. Betweenness centrality. Alters influence (negative/positive). Network size. Network density. Closeness (and mean closeness for network-level). Homophily (E-I Index measured on network-level). Constraint. Transitivity. Betweenness	In person: Interview and network maps.	Descriptive statistics. Variables converted to individual-level attributes for T-test and Z-test. Thematic analysis	Demonstrated change in networks over time of transition (recovery), which could inform optimal intervention planning. The relational focus alone may omit insights into structural factors	People attempting to maintain abstinence could experience guilt in relation to their social networks where others continued to use substances, implying seeking support could be more difficult in this context, A participant highlighted how prison had been an opportunity due to forced abstinence and access peer support indicating that help-seeking may be more difficult when services or peer support are not visible. The dense networks of people in recovery mirrored those of people still using substances. In the former the structure could be supportive in maintaining abstinence (and potentially accessing help, whilst the latter could both support and restrict recovery efforts.	Small sample and use of retrospective accounts of previous networks may result in recall bias. Limited details on the alter characteristic. Qualitative components are more robust than the statistical comparison.

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											centralisation.				
Fulginiti et al. (2016)	NR	MH: Outpatients with SMI	30 egos, 438 alters	Range NR (47.7)	57% female, 43% male	36.7% Non-Hispanic White, 46.7% Latino, 10% Multiracial, 6.7% African American	Marital status	Explicit	Describe patterns of suicidal disclosure and "examine associations between individual-level (e.g., social support, stigma) and suicidal disclosure and relational level factors (e.g., availability, closeness, homophily) and suicidal disclosure."	Personal Quantitative	Size Alters roles	In person: Interview and network maps	Bivariate analysis Multi-level models (alters level 1, egos level 2)	Multi-level modelling permitted novel understanding of disclosure practice taking account of individual and relational level factors Network maps assisted recall for completeness. Method could strengthen development of accurate (suicidal disclosure) profiles to inform treatment planning	77% had disclosed and 100% intended to disclose. People disclosed to only a proportion of their social networks (14%) and intended to disclose to 23%. Roughly 1/3 alters previously disclosed to would not be approached again, whilst 15% of network members were identified as new potential alters for disclosure (selectivity and change over time). Of individual factors, ethnicity remained a significant predictor of disclosure in multi-level models. Of relational factors prior disclosure, relationship type, relationship closeness, and all types of social support remained associated with disclosure in the multi-level models.	Methods detail is thin: unclear how the sample were recruited. Modelling description is unclear.
Fulginiti et al. (2022)	USA	MH: homeless young people	527 egos, 1318 alters	Range NR (21.0)	33.1% female, 55.3% male, 11.7% gender minority	22.9% Non-Hispanic White, 34.4% Black, 18.2% Latino, 24.5% Mixed/Other	Sexual orientation, education, homelessness duration, Traveller status, psychosocial variables, help-seeking variables	Explicit	Understand the prevalence and correlates of suicide-related disclosure in YAEH friendship networks at individual and relational level, consideri	Personal Quantitative	Size. Friend types. Friend genders. Homophily (gender identity and sexual orientation). Contact frequency. Social support (tangible and informational/emotional).	In person: survey via laptop (self-administered or assisted)	Bivariate multilevel analysis Multivariate multi-level models (alters level 1, egos level 2)	Finding relational level variables that can be modified to improve access to support overcomes the inconsistent individual level findings	Average friend network size was 2.5. 30% had disclosed to a friend in their lifetime. Of these, 45% made this during crisis, and 55% in retrospect. 21% of friends were disclosed to, and of these 45% were approached during crisis and 55% retrospectively (selectivity). Lifetime and concurrent disclosure were associated with lifetime history of unmet mental health needs and having friends who reliably offered social support	Well presented

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									ng concurrent and retrospective disclosure					in other research	(tangible and emotional/informational). Young people who identified as transgender or gender non-conforming were more likely to disclosure current suicidal thoughts. Post hoc analysis to compare friends with other relationships (family, provider, other) found no significant differences in disclosure patterns.	
Garcia et al. (2022)	Online	SU: People who use/formerly used opioids	4211 users (202 posts (44,103 comments)	NR	NR	NR	NR	Explicit	1) identify and describe advice-seekers on Reddit for buprenorphine-naloxone use using text annotation, social network analysis, and statistical modelling techniques. 2) predict advice-seeking	Whole Quantitative	Total degree. Eigencentrality. Closeness. Authority. Hub	Online: Webscraping tools used to extract relevant posts	Descriptive statistics. Mann Whitney and Chi tests with post-hoc comparisons (Benjamin-Hochberg). Generalised Linear Models	Combining individual and network factors produced the best fitting model for predicting advice-seeking in forum users	Advice-seeking posts were associated with people using (rather than formerly using) Buprenorphine. Advice seeking was associated with having fewer and less close social connections. Combining network and individual characteristics were better indicators of advice-seeking than either alone.	Well presented in terms of approach, although sample representativeness is unclear. Analysis is logical. Supplementary data presented reflecting good open science.
Kirst (2009)	Canada	SU: people who use drugs	80	Range NR (42)	48% female, 52% male	NR	Income, education level	Incidental	Understand how social capital can influence risk and health behaviours of injecting drug users and crack smokers - comparative examination	Personal Qualitative	Trust. Reciprocity. Companionship. Norms. Exchange of health information.	In person: Interview	Coding sensitised by the literature followed by development of themes.	Can demonstrate the complexities of social capital and the structural factors that influence decision making	See social capital section.	Well justified questions and data collection justified. Analysis lacks clarity about its deductive/inductive nature and the way the networks were analysed is not elaborated – but presents a coherent account of

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															the issues identified.
Perry & Pescosolido (2015)	USA	MH: People with a recent onset of illness	171	16-72 (30.6)	64% women	73% white, 27% black	Diagnosis, psychiatric symptoms, education, living situation, employment status	Explicit	1) Identify how ego, alter, relationship and network characteristics impact tie activation for health matters during early stages of mental illness. (also to assess impact of this on recovery - not relevant to this review)	Personal Quantitative	Size Proportion of women Proportion of kin Closeness Trust in physicians	In person: interview	Identify characteristics associated with activated health discussion ties using multilevel models (random intercepts) with alters at level 1 and egos at level 2	Allows analysis at multiple levels (ego, alter, and network)	See social capital section	Well reported with clarity on limitations
Silva et al. (2021	Brazil	SU: Homeless people who use crack cocaine	17 SUs, 4 staff (+ethnography)	22-53 (mean NR)	65% female, 35% male	94% black or brown	Monthly income	Incidental	Explore social support networks	Personal Qualitative	Number of people/institutions participants' network. Components linked to. Interaction type. Relationship strength/extent. Characteristics related to reciprocitie	In person: Interview. Ethnographic observation. Focus group.	Deductive coding considering micro and macro factors Graphic representation of network maps Content analysis	NR	Participants looked for help from specialist providers over psychiatric or family support. The important characteristics were friendliness. They also relied on emergency services.	Overall the paper is difficult to follow in terms of what was collected and how it was analysed in relation to the SNA aspect of the study

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											s. Boundaries from a group				

Abbreviations: ChiSq = chi-squared, MH = mental ill-health, NR = not reported, SU = substance use

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Relational influences on help-seeking for mental health and substance use problems among people experiencing social marginalisation: a scoping review

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Relational influences on help-seeking for mental health and substance use problems among people experiencing social marginalisation: a scoping review

Abstract

Objectives: Understand the relational influences on help-seeking for mental health and substance use problems among people experiencing social marginalisation, with a focus on research applying social capital theory and social network analysis methods.

Design: Scoping review.

Data sources: EMBASE, Web of Science, Criminal Justice Abstracts, and SocINDEX were searched up to June 2023, and Web of Science email alerts were used to capture any further publications up to June 2024.

Eligibility criteria: English-language, peer-reviewed publications that (1) focused on/discussing help-seeking for mental health or substance use problems; (2) included adults experiencing social marginalisation beyond socio-demographic factors; and (3) applied social capital theory or social network analysis methods.

Data extraction and synthesis: We extracted and charted data pertinent to review objectives, and narratively synthesised results.

Results: Twenty-seven papers were included. Most (n=19) focused on the experiences of people who used drugs. Five specifically focused on help-seeking, four of which applied quantitative social network analysis, one was framed by network theories of social capital, and one referred to social capital in interpreting findings. The remaining 22 papers discussed help-seeking whilst focused on different

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phenomena. Seven of these framed their approach with social capital, but none explicitly applied social capital to help-seeking. Eight papers used social network analysis, with four focused on help-seeking and seven using personal networks. Social/relational influences identified included: Fear of losing social capital, the risks of high bonding capital, service providers as social capital, selective help-seeking, trust, and network culture.

Conclusion: Social capital, interconnected with the tight-knit bonds within marginalised groups could deter help-seeking. Knowledge and attitudes towards help and help-seeking shaped by past experiences and network cultures influenced help-seeking and contributed to a cautious and selective approach. Theoretical elaboration and empirical research is required to better appreciate the relational influences on help-seeking for mental health and substance use problems among people experiencing social marginalisation. Social capital may provide a useful theoretical approach and whilst social network analysis methods have been applied, they are under-utilised.

Keywords

Mental health; substance misuse; decision making; social capital; social network analysis, help-seeking

Strengths and limitations of this study

- Applied rigorous scoping review methods and tested a quality appraisal tool on studies using social network analysis
- Identified important relational influences that encourage or deter help-seeking among people experiencing social marginalisation, with implications for intervention planning

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- Papers may have been overlooked due to variation in terminology and concepts related to help-seeking
- Studies of other types of social marginalisation, or applying other social theories or research methods were not included

INTRODUCTION

People marginalised by circumstances such as homelessness or justice system involvement, have higher levels of mental health and substance use problems than the general population.[1,2] . Whilst evidence-based treatments for mental health and substance use problems (MH/SU) are available, these are not accessed equitably across populations,[3] suggesting that certain groups experience greater barriers to access than others. When MH/SU are not addressed with effective treatment and support, there is an increased risk a person will reach a point of crisis that brings them to the attention of emergency health and other services. Indeed, those experiencing homelessness or with justice-involvement in their lives, are disproportionately represented in attendances at emergency services.[4,5] MH/SU are the primary reasons for attendance among these groups and a driver of frequent attendance.[5,6] This high use of emergency care indicates that people experiencing social marginalisation may face barriers to accessing early and preventative MH/SU services.

Accessing healthcare depends on interrelated demand and supply elements, spanning systemic, social, cultural, and personal factors. Levesque et al.[7] describe five distinct but interrelated components required for access: identifying healthcare needs; seeking healthcare services; reaching healthcare services; using services; and being offered appropriate services. Barriers and facilitators (which may be personal, social, cultural, structural, or organisational) act on different components to affect access, and their impact will differ between people with different characteristics, in different

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contexts, and when accessing different types of healthcare. For example, among people experiencing justice-involvement, barriers to service access include being unable to register with a general practitioner, stigma within society and services, cost (where health and social care is not funded by general taxation), service fragmentation and frequent change in providers, service designs that do not account for multi-morbidity, and waiting lists.[8–11]

Help-seeking is a fundamental component of accessing treatment and support. It involves responding to perceived needs by actively seeking assistance, support, or guidance from various sources, including informal networks, community resources, and professional services.[7] Research into help-seeking for MH/SU often uses healthcare utilisation rates as a measure of help-seeking, which does not distinguish between the act of seeking help and successfully accessing treatment.[12,13] Rather, we regard help-seeking to be the steps individuals take to identify and reach out for help, regardless of whether they ultimately engage with that help. This interpretation can include individuals not currently accessing any help despite trying to, whilst excluding those court-mandated to receive services they feel they do not need.

There may be specific social and relational dynamics related to help-seeking for MH/SU compared to help-seeking in general, as the former carry high levels of social stigma. There are differences in MH/SU stigma depending on the nature and severity of someone's presentation (e.g., some mental health conditions are less stigmatised than others, and there are different attitudes and legal approaches towards illicit drugs and alcohol). Additionally, stigma may operate differently to impact help-seeking among people who experience different forms of social marginalisation.[14] For instance, based on gender, ethnicity, social class, other characteristics and their intersections. However, evidence gaps have been identified in understanding help-seeking among people who experience social marginalisation that goes beyond age, gender and ethnicity.[15]

In this paper we focus on social marginalisation resulting from homelessness, justice involvement, substance use problems and pre-existing mental ill-health because these are core aspects of severe

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and multiple disadvantage and are often experienced together.[9,16] The challenges faced by people experiencing these situations differ fundamentally to the general population and intersect with help-seeking in different ways. For instance, women experiencing homelessness face, competing priorities (such as accommodation loss), may hide difficulties from authorities who have powers to intervene with their children, and experience exhaustion from navigating the system, leading to them ceasing to seek help.[17] People in custody, can be deterred from help-seeking for MH/SU due to a perceived need to project strength, control, and autonomy, in order to retain their status and related safety.[18,19] Among those in prison, negative past experiences can lead to mistrust, a perception help is useless, and fear of further negative experiences.[18,19] Thus, this paper explores social marginalisation arising from experiences such as homelessness and justice-involvement, rather than socio-demographic factors.

Applying social theory to attain a more nuanced understanding of the relational influences on help-seeking for MH/SU among people experiencing social marginalisation is essential given the disproportionate prevalence of MH/SU problems in these populations and the identified evidence gaps. Desire and ability to seek help involves personal and relational influences, including the attitudes, beliefs, knowledge, norms, and resources in communities and peoples' social networks. Existing theoretical models point to the relevance of these relational aspects when applied to help-seeking.[20,21] However, these relational aspects remain under-explored compared to individual factors, particularly among people experiencing social marginalisation. This is important when considering the range of relationships people have, and their embeddedness within communities with different cultures and social representations of help-seeking.[7] Further there has been limited application of social theory to explain the relational mechanisms behind help-seeking in populations experiencing social marginalisation,[19,22,23] potentially impacting our ability to understand how and why help-seeking takes the forms it does among those most excluded from communities. Social capital provides an understanding of relational influences based on social connections,[21,22] as opposed to approaches which focus more on individual or structural influences.[(e.g. 21,24–26)]

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Social capital can be considered as the resources (e.g., information, emotional and tangible support) available to an individual through their relationships. Social capital theory explains how the structure and nature of relationships, at a micro (individual), meso (social network), and macro (community/societal) levels, enable or constrain behaviour through access to resources and information, and the sharing of beliefs, attitudes, and cultural norms.[27–29] This enables potentially conflicting influences which might impact an individual to be disentangled. For example, substance use might be actively encouraged amongst someone's peers but stigmatised amongst their family and local community. Social capital has been further elaborated to consist of bonding, bridging, and linking capital. Bonding capital refers to the social capital obtained through relationships within a group, whereas bridging refers to that obtained from relationships between groups.[29,30] Linking capital is conceptualised as social capital obtained from relationships across different levels of a social hierarchy, such as between citizens and institutional providers of services.[31] Social capital theory therefore provides a means to theorise the relational influences upon help-seeking for MH/SU occurring within social networks embedded in communities.

Evidence indicates a positive relationship between social capital and health, although different groups do not always benefit or benefit equally.[32] Social capital can have positive or negative implications for a range of outcomes including health.[33,34]There is a need for greater empirical examination of the mechanisms by which social capital has its effects, and how this may differ among different groups.[32] To maintain good health, the influence of social capital on accessing help at a time of illness, through either facilitating or deterring help-seeking, is one potential mechanism that could contribute to better health outcomes for people experiencing social marginalisation.

If relational influences act through peoples' social networks, empirical research is needed at this level. Social network analysis (SNA) takes an approach to research in which networks are a central concept of interest.[35] SNA is well suited to examining social capital at the 'meso' level, i.e., at the level of networks within communities (with micro representing study of the individual, such as their

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characteristics, and macro representing wider societal structures, such as law or policy). It presents a means to elucidate the mechanisms by which social capital may affect different outcomes, including help-seeking. SNA includes a range of methods to study structure, composition and dynamics of social networks in their situated context.[36]

There are two primary applications of SNA. Tirst involves analysing personal networks of individuals (egocentric networks or 'egonets') by collecting quantitative and/or qualitative data about a person (ego), others to whom they relate (alters), and how alters relate to one another. The second involves analysing usually quantitative data on a whole network (sociocentric networks) of all people within a bounded community, such as a school, and identifying the connections between them. In both cases ego and alter characteristics can be collected, and the nature of relationships ascribed different attributes (e.g. supportiveness or conflict levels). Analyses can be descriptive, involve identifying patterns in behaviour, or modelling to predict outcomes. SNA has utility for gathering and analysing data to empirically examine the relational influences on help-seeking for MH/SU and the mechanisms by which these operate.

There is limited literature that examines MH/SU help-seeking among people experiencing social marginalisation, especially that which considers relational over individual influences. Better understanding relational influences is essential to inform tailored approaches that enable those experiencing stark health inequities to seek, and ultimately access, help for highly stigmatised health needs. Social capital theorises how and why relationships in social context influence behaviour, indicating its potential utility for understanding influence on help-seeking that goes beyond individual or structural considerations. The growing application of SNA in health research, and its suitability for operationalising and empirically examining social capital, suggests SNA research may highlight key considerations for understanding help-seeking for MH/SU among people experiencing social marginalisation.

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The broad academic and practice fields in which social capital and SNA are applied indicates a need for a multidisciplinary synthesis to minimise fragmentation in the evidence base. Using a scoping review, we aimed to establish current knowledge about: the utility of social capital theory to explain the relational influences on help-seeking for MH/SU in people experiencing social marginalisation; and how SNA methods have been applied to study relational influences of help-seeking for MH/SU with people experiencing social marginalisation.

Objective

To synthesise the literature applying social capital theory or SNA to understand relational influences on help-seeking for MH/SU among people experiencing social marginalisation.

Review questions

1. How have theories of social capital been applied to understand the relational influences on MH/SU help-seeking among people experiencing social marginalisation?
2. How have SNA methods been applied to understand the relational influences on help-seeking for MH/SU among people experiencing social marginalisation, and what methodological insights have been gained?

METHODS

We followed established scoping review methods[37,38]and report this using the PRISMA Scoping Review Extension.[39]

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Protocol and registration

We pre-published our protocol on OSF (www.osf.io/nfkmq).

Patient and public involvement

This review is part of a larger study informed by a Patient and Public Involvement Group consisting of people with experience of justice-involvement. They have confirmed that understanding how to increase early help-seeking for MH/SU is important and will advise on dissemination of review findings alongside wider study activities.

Eligibility criteria

Eligible papers examined MH/SU help-seeking from any source among adults experiencing social marginalisation beyond demographic characteristics and applied either social capital theory or social network analysis. We did not limit context or date, but restricted language to English and our search to peer-reviewed sources.

We sought papers which focused on or discussed help-seeking for MH/SU among adults (18+) experiencing social marginalisation. We regarded help-seeking as an individual's action(s) to try to elicit, or increase their levels of, help. Papers focused on people already receiving help were excluded as these were not about seeking help.

We considered aspects of social marginalisation that went beyond demographic factors. This included involvement in the criminal justice system (justice-involvement), homelessness, pre-existing mental ill-health, using drugs, problem drinking or gambling.

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We included papers if they used social capital theory or applied social network analysis. Whilst there are wider ways of thinking about relational influences on help-seeking, we focused on literature applying social capital theory or social network analysis approaches. The decision to focus on papers which engaged with social capital theory and social network analysis was due to their growing application across fields of research, and to keep the review firmly based around relational influences.

Initial scoping searches identified a very limited literature applying social capital or social network analysis methods to MH/SU help-seeking when excluding papers where the marginalisation experience was solely related to MH or SU problems. However, these papers offered relevant findings, due to the prevalence of these experiences among those experiencing marginalisation due to homelessness or justice involvement.[9,16]

Information sources

We searched four databases to identify literature across health, social science, criminology, and criminal justice: Criminal Justice Abstracts, EMBASE, SocINDEX, Web of Science (All Databases).

Search strategy

Initial searches for SNA or social capital theory *and* mental health or substance use in Web of Science produced a manageable number of publications for review. We thus proceeded in our full search without using search terms for help-seeking or social marginalisation, allowing us to take a nuanced approach to inclusion that accounted for variation in definitions and terminology. As a scoping review, we did not include an exhaustive range of types of social marginalisation, selecting problem substance use (alcohol and drugs), problem gambling, mental ill-health, homelessness and justice-involvement due to their association with multiple disadvantage.[9,16]

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The review team considered papers carefully for whether the phenomena studied could be interpreted as help-seeking for MH/SU. We determined this to be where a person approached another/others to discuss or disclose MH/SU concerns, or where someone sought advice, support or help related to their MH/SU. We attempted to capture the inverse, where people were 'not help-seeking' by disengaging from or avoiding treatment and support. Consistent with scoping review methods, we did not use every possible term for MH/SU, but selected relevant terms in conversation with a subject librarian that would provide broad coverage.

In each database, we combined search terms for key concepts using Boolean operators. We searched title, abstract, keyword, and where available, subject headings/indexing. In Web of Science, we searched by 'Topic' (title, abstract and keywords). Table 1 shows the template search strategy, with the full search strategies included in the Supplementary File.

We set up email alerts in Web of Science (which indexed all the included papers and had the largest number of results) to identify new publications as the review progressed until June 2024, reviewed the reference lists of included papers, and met regularly to determine if additional searches were needed, although this was ultimately not required.

Table 1. Template search strategy

Questions	Key concepts	Key search terms
How have theories of social capital been applied to help-seeking for MH/SU among socially marginalised groups?	Social capital theory Social network analysis Mental health Substance use Help-seeking Socially marginalised groups	"Social capital" OR "social network analysis" AND "mental health" or "mental illness" or "psychosis" or "schizophrenia" or "depression" or "anxiety" or "personality disorder" or "eating disorder" or "post traumatic stress disorder" or "suicide" or "suicidal" OR
What insights have been gained through applying SNA to understand help-seeking for MH/SU in socially marginalised groups?		

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		"Substance use" or "substance abuse" or "substance misuse" or "addiction" or "drug dependence" or "alcohol dependence"

Selection of sources of evidence

CC conducted the searches on 26-27th June 2023, imported results into reference management software[39] to remove duplicates, and imported de-duplicated results into Rayyan[40] to facilitate team review. Email alerts for papers meeting our search criteria were checked and reviewed until June 2024 with the intention of adding these as they emerged.

In an initial calibration process, three reviewers (CC, DG, RK) independently screened the same 10% of citations at title and abstract level and discussed results to agree a consistent approach. Following this, the three reviewers screened all papers at title and abstract level with at least two reviewers screening each record. We met at the mid- and endpoint of title and abstract screening to discuss inclusions, exclusions, and any areas for additional searches. Disagreements were resolved in three-way discussion, producing a list of papers relevant for full text review.

The three reviewers independently read 10% of papers at full text to determine eligibility for inclusion as an initial calibration process. Following this, all papers were independently screened by at least two reviewers. We again met at the mid- and endpoint to discuss decisions and resolve any conflicts. We intended this stage to be iterative,[38] but did not identify a need for further searches. We checked all references lists of included papers and relevant papers that were outside our scope.

Data charting process and data items

Three reviewers (CC, DG, RK) piloted a data charting template (data items section) before meeting to review the consistency in content and detail of the extracted data. Minor amendments were made to

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clarify where focus on help-seeking and social capital were explicit or incidental. We included papers that had incidental findings of interest but were not primarily focused on help-seeking/social capital/SNA due to the limited literature. We added extraction of sample size and study aim(s), and streamlined our recording of individual study results. Reviewers divided the remaining papers for data charting, with CC checking all extracts. It was not necessary to contact authors for further details. For each paper we recorded the data detailed in Table 2.

Table 2. Data items extracted

All papers	• Year published • Year data collected • Location and country • Population • Sample size • Socio-demographic characteristics (age, sex/gender, ethnicity, other) • Aim and extent of help-seeking (implicit or explicit)
Social capital papers	• Extent of focus on social capital (explicit or incidental) • Level of social capital discussed (micro, meso, macro) • Types of social capital explored (focusing on bonding, bridging and linking) • Theoretical orientation of the paper • Summary of any theoretical argument relating social capital to help-seeking • Results relevant to help-seeking
SNA papers	• Type of method (quantitative, qualitative, mixed methods) • Social network type (egocentric network/personal network, whole network) • Network features studied (e.g. centrality, homophily) • Data collection and analysis methods, • Findings related to help-seeking or the utility of SNA

Critical appraisal

We anticipated we may find more theoretical papers discussing social capital and because of our methodological focus on SNA, we elected to appraise the quality only of empirical SNA papers. As there are no validated critical appraisal tools for SNA, at least one reviewer appraised the quality of each paper using the Mixed Methods Appraisal Tool (MMAT), selected for its ability to support

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efficient appraisal of various study types.[41]We were cognisant of potential limitations in elucidating methodological strengths and limitations of SNA designs and in this respect were testing the utility of MMAT for SNA.

Synthesis of results

We synthesised the results using data summaries and visualisations, before developing a narrative synthesis addressing each question. For papers discussing social capital we summarised, grouped and compared these according to the number and type of papers, publication dates and rate, and sample, sample demographics, country, focus on mental health or substance use (or both), theorists and types of social capital. For SNA papers, we summarised the number and type of study, sample, sample demographics, country, focus on mental health or substance use (or both), and methods applied. These were discussed as a wider team at the midpoint to capture impressions and inform the final synthesis and reporting.

RESULTS

Selection of sources of evidence

We identified and screened 4487 papers at title and abstract level, and reviewed 122 at full text. We included 27 papers. Five were studies focused on help-seeking, of which four were identified in database searches and one from wider reading. The latter had not used 'social network analysis' as a term in full thus not being identified in initial searches (see Figure 1). An additional 22 papers were retained in the review due to incidental references to help-seeking. Whilst help-seeking was not the focus, they provided useful synthesis material to better understand the phenomenon.

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Characteristics of sources of evidence

We summarise the characteristics of the included papers here, and present our full data extraction in the supplementary file in Table S1: Social Capital Papers, and Table S2: Social Network Analysis Papers.

Publication date: Papers were published between 2001[42] and 2023.[43–45] There has been a gradual increase in papers published that discuss relational elements of help-seeking for MH/SU among people experiencing social marginalisation (Figure 2), although the vast majority only make incidental references to help-seeking.

Country: High and upper-middle income countries are represented (Figure 3), with the largest number of studies from the USA (n=7). Two literature review papers potentially included participants from multiple countries,[46,47]one study was conducted online and therefore could include participants from multiple countries[48] and one did not report the country where data were collected.[49]

Sample size: Sample size varied by study design from seven in the smallest qualitative study [45] to 4211 in a whole network study that took data from internet posts.[48]

Demographics: With the exception of the literature reviews,[46,47] most studies reported age, gender, and ethnicity of their primary participants. Seven studies had a clear majority (over 60%) of men, [42,43,45,50–53] seven had a clear majority of women,[54–60] seven were relatively equally split[49,61–66] and four did not report sex/gender of the sample.[44,48,67,68]

People aged 16 to 72 are represented. Five papers did not report the age of participants.[44,48,59,67,68] Three papers examined the experiences of a specific ethnic group: African Americans in the USA,[63] Orthodox Jews in Israel [51], and Roma people in the Czech Republic.[44] Ten papers did not report the proportions of people of different ethnicities whilst the others included mixed ethnicity samples,[44,50,54–57,62,65,68] although for some this mix was minimal.[43,58,61]

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Substance use descriptors were frequently provided.[42,45,50,52–54,61,63,66] Fewer papers provided mental health characteristics.[56,58,64]

Type of marginalisation: Fulginiti et al.[64]and Oliver and Cheff[55] sampled young adults experiencing homelessness. Timmer et al.[47] reviewed the literature on people with multiple disadvantage in contact with the criminal justice system. The remaining papers sampled people whose marginalisation experience was due to mental ill-health (n=5) or drug use (n=19). However, most samples likely experienced multiple types of social marginalisation.

Issue help sought for: Two papers examined disclosing suicidality,[49,64]one focused on approaching people to discuss health in the context of recent onset of mental ill-health,[56] one studied advice-seeking about Buprenorphine for treating opioid dependence,[48] and in line with our intention to capture 'not help-seeking', one paper discussed why people disengaged from SU treatment.[53] The remaining papers incidentally reported on help-seeking within the wider findings. No studies used the term help-seeking.

Critical appraisal within sources of evidence

Applying the MMAT[41] to SNA papers provided an initial framework for assessing quality. Whilst this allowed us to identify broad areas of strength and limitations, it provided little direction to the specific considerations for different types of social network studies. The main areas where we identified limitations were in clarity of reporting methods, particularly in how qualitative findings were synthesised and how multiple methods were integrated in a single study to reach conclusions. See Table S2 in the Supplementary File.

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Results synthesis

The results of individual sources of evidence are presented in Table S1 and Table S2 in the Supplementary File.

Application of social capital theory

Twenty-three papers referred to social capital. Only two were studies focused on help-seeking,[53,56]of which only Perry and Pescosolido[56] directly applied social capital in their work. The remaining 21 were focused on other phenomena but with incidentally relevant findings.

Most papers were qualitative, with two literature reviews,[46,47]one mixed methods study,[50] and one quantitative study.[56]. Eighteen used or described social capital, whilst five only made a short reference to it.[52,54,58,59,66]

Theoretical orientations

Most papers cited the seminal works of Bourdieu,[27] Coleman,[28] and Putnam.[29] Perry and Pescosolido[56] present the only detailed theoretical argument for the role of social capital in influencing help-seeking, in the context of mental illness, drawing from network theory of social capital[69] and their own previous work.[22,23,70]

Six further studies were framed using social capital theory, as elaborated by a particular theorist(s), but only incidentally referred to help-seeking.[50,55,57,63,65,68] Five qualitative papers and one literature review provided a general description of social capital and key theorists in the area without any further framing of their study, and picked up relevant findings in the discussion.[42,51,60–62]

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Seven studies[44–46,52,53,58,67] referred to social capital within 'recovery capital', citing the work of Granfield and Cloud.[42,71,72] Recovery capital draws on the work of social capital theorists but is a broader concept for explaining substance use recovery that incorporates personal, physical, and cultural capital. We only included papers that referred to the social capital component of recovery capital. Radcliffe and Stevens[53] discuss reasons for not seeking help (treatment engagement/disengagement), but reference to theory was limited in the findings and discussion. Three papers did not provide a theoretical basis for their references to social capital.[54,59,66]

Forms and levels of social capital

No studies considered bonding, bridging, and linking specifically in relation to help-seeking. Six papers mentioned bonding, bridging and linking in relation to their data.[45,46,50,51,55,61,67] Only Silva et al.[57] explicitly stated the levels of social capital of interest in their study. They considered the micro and macro level, defining these as how individuals interact within groups and as how thoughts and behaviours influence network structures respectively. However, they do not apply this explicitly to understanding help-seeking.

Methodological insights gained through applying SNA

Eight papers reported using social network analysis (SNA). Six used quantitative SNA: four focused on help-seeking[48,49,56,64] of which three adopted multi-level modelling.[49,56,64] One SNA paper adopted mixed methods,[50] and three used qualitative SNA.[43,57,65] Although two did not use SNA in full, instead using elements of it to guide data collection and coding of qualitative data respectively,[57,65] we have included them here as they engage at the relational level in their data collection and/or analysis.

One study used whole network SNA, taking data from online forums[48] and analysing this statistically. Seven papers used personal network SNA.[43,49,50,56,57,64,65] Three studies involved the completion of a

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network map during interview.[43,49,50] Analytical approaches in the personal network studies varied, reflecting the different types of data and collection methods.

Conclusions about the utility of SNA from paper authors

Authers considered qualitative SNA to be useful for understanding relationships and their functions,[43] including relationships from which someone could seek help. Network maps were identified as a valued interview tool for achieving more depth in understanding relationships[43] and aiding recall for achieving data completeness.[49]

Multilevel modelling was emphasised for its ability to generate novel findings precluded in traditional statistical analysis, by accounting for the unique contributions of individual characteristics, relationship factors and network features.[49,56,64]

The potential for ego perceptions of alters characteristics and relationship qualities to be subjective was reported as a limitation.[65] However, it could be credibly argued that it is the ego's perception that is of interest in understanding the relational influences upon them.

Results from SNA studies could inform more nuanced network-based interventions that allow for relational level influences on individual behaviour to be considered within the wider social context.[50,65]

Relational influences on help-seeking

Fear of losing social capital

Fear of losing social capital had an important influence on whether to initially seek help, and continue to do so. People feared that being seen to be associated with a drug using community, which would be highlighted by attending treatment, could result in a loss of conventional social capital given the

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associated stigma.[53,66] In contrast, being known to have engaged with treatment or to have tried to move away from substance use could risk the loss of alternative forms of social capital that marginalised communities depended heavily upon. For example, losing the status that can be attained in the drug using community[53] or the protection and employment offered by drug gangs[54] may disincentivise help-seeking.

Risks of high bonding capital

A consistent theme was the risk that high bonding capital (where people in a community are well connected to one another), in the absence of bridging and linking capital, could limit the ability to attain knowledge about resources and opportunities to seek help.[45–47,50,61]Bonding capital may be beneficial for help-seeking where relationships are with people perceived as likely to be helpful or who encourage help-seeking. However, high bonding capital could also deter help-seeking where there are strong norms around abstinence. For example, that a person may feel they cannot or do not want to attain abstinence, or where there is a risk of rejection if someone experiences a relapse.[45,50] High bonding capital within tightknit communities where there is ignorance, stigma, and reluctance to acknowledge substance use could be equally restrictive,[44,51] as well as where there is strong bonding capital connected to substance use.[53,54] Most papers exploring this phenomenon were among people who use drugs. However, among those with people with mental illness, a small number of people with relationships characterised by closeness, kinship or partner roles were most likely to be approached,[56] indicating that bonding capital is still important.

Service providers as social capital sources

Service providers were seen as a source of bonding, bridging, and linking capital. Service providers were sometimes the only sources of bridging and linking capital in peoples' lives and vital for accessing

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support and sustaining engagement with it.[45,52,55,61] Service-facilitated opportunities to develop bonding capital with other people experiencing social marginalisation was sometimes valued.[61] However, sometimes this was not achieved, or was not desired by participants, for example where they did not see value in building relationships with others struggling with their own difficulties.[52,53,62]

Selectivity/Preferred sources of help

People selectively seek help from others when their relationships are characterised by care, helpfulness and support, availability, closeness, commitment, trust, and companionship.[43,49,56,57,64,65] This selectivity is evident in that people only approach a subset of alters for help [49,56,64] Among adults with mental ill-health, disclosing suicidality or seeking health-related discussions with particular alters were associated with alter age, having previously disclosed to that alter, relationship type, closeness, social support provided in that relationship, and shared experience of mental ill-health.[49,56] Previous social support was associated with disclosure of suicidal thoughts to particular friends among young adults experiencing homelessness, both historically and at the time of experiencing suicidality.[64] Among people accessing mental health services, the people to whom someone had disclosed and intended to disclose to differed.[49] This suggests that experiences of help-seeking from particular alters (below) may inform selectivity around who is approached in the future.

There are contrasting findings across studies about the roles of alters (e.g. family, friend, service provider) from whom people seek support. Among people with mental ill-health, Amadei et al.[43] found family were most commonly approached, with professional service relationships of secondary importance. Perry and Pescosolido[56] refine family further, identifying that mother and partner were most likely to be approached, with professional services equally as likely to be approached as neighbours, siblings, friends, and fathers. Young adults experiencing homelessness were more likely to approach friends,[55] and homeless adults using crack cocaine preferred specialist services and used emergency care.[57] Peer/mutual support was viewed positively for some people seeking MH/SU

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support, describing these as relationships and communities that embodied care and belonging.[43,50] This was supported by findings that alters who shared an experience of mental illness had significantly increased odds of being approached for help.[56] However, it is first essential to know who and where peers are, and maintain good relationships with peer leaders to avoid ostracism,[66] again highlighting a risk in strong bonding social capital. There was an intersection between friends and professional service providers, with friendship sometimes attributed to professionals, including religious leaders,[43] raising the issue of defining roles clearly in network studies.

Irrespective of role, alters were only approached when they were anticipated to be understanding and honest.[42,52,62] Further, some participants were concerned about burdening friends/family [42,62] or not wanting to be seen to complain.[60] Support can be vulnerable to change when the person/people providing support also experience social marginalisation and have limited resources of their own.[60] Further, family and friends could be actively unhelpful, with professional services expertise being preferred.[55,57,58]

Trust

Only Perry and Pescosolido[56] discussed trust held within the network, in line with considering this as a resource. They showed a greater likelihood of an alter being approached to discuss health matters where network level trust in physicians is higher. All other studies reflected an understanding of trust as either something held by the ego, or in some cases as a property of an alter/relationship. Previous help-seeking experiences impacted upon trust that other people were likely to be helpful, which influenced future help-seeking attempts.[50,51,55,57,62,66] This may explain quantitative SNA results, which demonstrated selectivity and change in who was approached for help at different time points.[49,56] Past negative experiences, harms or neglect by authority figures,[51,55,60] and service providers specifically,[50,57,62,66] could erode trust in relationships in general, as well as in specific relationships, and deter future help-seeking. For young people this contributed to a desire to prove they did not

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need support, or could live without it, presenting a psychological barrier to seeking help if and when needed.[55] Whilst the absence of trust could be a barrier, Kirst [65] and Oliver and Cheff [55] highlight the importance of trust and companionship in relationships for enabling someone to access resources mediated by relationships with peers and service providers. Palombi et al.[67] noted that hoping that help will be effective plays an important role, alongside fear of what a response may be, reflecting the concept of trust in relationships.

Network culture

The importance of network culture and its influence over time on forming norms, beliefs and attitudes towards help-seeking across a community has received limited specific empirical examination in marginalised groups. Over and above the characteristics of egos and alters, the average level of pro-health care attitudes across a social network, indicative of network culture, is associated with help-seeking in the context of mental illness.[56] The potential impact of tensions between different cultural norms within one person's network is illustrated with an example from Chile where Mapuche people could be encouraged or discouraged to go to psychiatric or Machi healers by different members of their community.[68]

Societal level influences

Structural barriers to accruing social capital and influencing help-seeking were discussed to a very limited extent. Stigma, drug laws, and policy that fail to recognise opportunities for harm reduction, and wider structures that embed social marginalisation on the basis of ethnicity, gender, sexual orientation and gender identity were all mentioned, but with limited elaboration of their relevance to help-seeking.[47,59,65] African Americans may face additional barriers to help-seeking in the USA because

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their ethnicity places them in a position of lesser power[47,63] resulting in a lack of social capital that would enable access to resources and information to facilitate help-seeking.[47]

DISCUSSION

This review presents a summary and synthesis of current knowledge, across diverse disciplines, of the relational influences on help-seeking for mental ill-health and substance use among people experiencing social marginalisation. Specifically, we examined applications of social capital theory and social network analysis.

Summary of evidence

There is limited literature that uses social capital theory or social network analysis to examine relational influences on help-seeking for MH/SU among people experiencing social marginalisation. We identified few studies that sampled people experiencing homelessness,[55,57,64] and the only paper discussing justice-involved people was a literature review.[47] In the few studies explicitly focused on help-seeking, the term 'help-seeking' was not widely used. This may have implications for future reviews attempting to examine help-seeking for MH/SU or other needs, potentially resulting in few results. A-priori theorisation and decisions about what the review team considers 'help-seeking' will be beneficial.

High bonding capital among people experiencing social marginalisation to others within minority communities, in the absence of bridging and linking capital, could deter help-seeking for MH/SU. This extends the evidence on the health risks of high bonding capital[32,34] by highlighting that deterrence of help-seeking may be a mechanism by which social capital effects health. We noted two ways in which this mechanism may operate. Firstly, help-seeking may present a risk of losing social capital in networks and communities where norms or culture do not support engaging with authoritative

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structures, or where there is stigma towards people who have mental ill-health or substance use problems, thus deterring help-seeking. Perceived stigma toward people in need of help, translating into internalised stigma, has been shown to negatively influence mental health help-seeking.[73] Whilst the risk of losing social capital also applies to people who possess high levels of bridging and linking capital, arguably the risk is more pronounced for people who rely on being part of a close-knit community. Secondly, an absence of linking and bridging capital can reduce access to varied information[74] about when help can and should be sought, what is available, and how this might be experienced, leaving people without the information needed to decide to seek help.

Viewing social capital as the sum of resources within a network, having lower bridging and linking social capital could indicate a network holds fewer resources, and thus influences people to make deliberate decisions about from whom to seek help. There were references to both seeking out friends and family, and avoidance of doing so where people were conscious of not burdening others with limited resources. This is in contrast to evidence that people make greater use of weak ties and avoid stronger ties when disclosing sensitive personal circumstances,[75] However, Small's conclusions were developed from studies with people with a greater degree of social integration (university students), who may have greater access to weak ties through their social positionality, and did not examine highly stigmatised issues. Findings from our review indicate that relationship qualities, including closeness may be particularly important for sensitive and highly stigmatised illness such as mental ill-health and substance use among people experiencing social marginalisation. The small volume of evidence identified in this review limits our ability to draw firm conclusions, and the importance of tie strength may warrant greater exploration in populations where there are low levels of bridging capital.

Selectivity about from whom help is sought was clear, with preferences about alters social roles varying between studies.[49,56,64] However, relationship qualities were more important than alters' respective roles. Specifically, those relationships characterised as caring and perceived as likely to be helpful were the ones that were approached. Further, alters that participants did or would approach

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changed over time, reflecting the influence of past experience on where, when and from whom someone may seek help. This contrasts with less deliberative approaches to help-seeking for lower-level concerns among students[75,76] and is more consistent with theories that help-seeking is a socially influenced, but still deliberative, action.[22,23]

Qualitative studies showed that at times, participants characterised professionals as friends, highlighting a need for a clear understanding of how people define the roles of alters in their networks, especially when measuring this in quantitative approaches. In the quantitative analyses, variables associated with help-seeking were identified, with some conflicting results. More studies that account for different experiences of marginalisation in different contexts but using the same operationalisation of variables could assist in furthering understanding the relational influences on help-seeking and the best ways to apply social capital and social network analysis to study these.

Trust is debated by social capital theorists regarding whether it is characteristic of relationships or a more generalised community-level asset, and whether it contributes to, results from, or is integral to social capital.[77–80] Trust is an important relationship quality that enables access to social capital, and network levels of trust in practitioners were associated with help-seeking. Mistrust of authoritative services is a well-elucidated cultural norm within some communities that deters help-seeking, e.g. among people in prison[18] and women who use drugs.[81] Trust in health care providers at an individual level varies across communities, partly explained by levels of community trust and community social capital.[82] The importance of network (and community) culture and attitudes towards different sources of support has received little examination in groups who experience marginalisation by some communities/social groups, but who have strong bonding capital in communities sharing their marginalisation experience, although is starting to be recognised in some contexts.[44]

Structural factors were considered to a limited extent (e.g., law and policy that fails to allow for harm reduction opportunities, sociodemographic characteristics). Future research that elaborates exactly how these macro factors influence help-seeking for MH/SU among people experiencing social

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marginalisation is required, particularly accounting for the intersecting experiences that further compounds disadvantage.[83] Better understanding structural influences can inform and enhance the impact of 'Inclusion Health' policies and practice[84] to assist those in greatest need of MH/SU support.

SNA methods present a useful means of empirically examining help-seeking among people experiencing social marginalisation, through use of visual network mapping, the application of multi-level models, and its potential for informing intervention development. Although SNA in health and social care research is increasing, the limitations in the wider evidence base are evident here in relation to help-seeking for MH/SU for people experiencing social marginalisation, including the need to better understand relational influences on health-related behaviour, the mechanisms by which social networks have their effects, and greater use of longitudinal data to understand change over time.[85]

Limitations of the included studies

No studies used the term help-seeking specifically. For relevant papers to be identified for future reviews, authors of primary research may consider adopting consistent terminology or including help-seeking as a key word.

We only quality appraised SNA studies and did not exclude papers on quality grounds. Our main observation was limitations in the clarity of reporting, particularly in how qualitative SNA findings were synthesised and where multiple methods were combined in a single paper. We included 27 papers and provide a broad overview of how social capital and SNA are applied, thus our findings can be read with sufficient confidence for that purpose. Our synthesis of findings from the social capital studies should be interpreted with awareness that these papers were not quality appraised.

Most papers included participants who used drugs and several included participants experiencing mental health challenges. Although homelessness, sex work, justice-involvement and poverty were all

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represented, and there are significant overlaps between populations, there is clearly a need for research that examines the unique relational dynamics influencing help-seeking when people experience social marginalisation due to different and multiple experiences. Core demographics were not or could not be reported for some studies. Reporting precise sample demographics and characteristics is essential for future reviews that seek to take account of the intersecting experiences of social marginalisation including intersections between age, sex/gender, ethnicity or sexual orientation.

Limitations of the review

We conducted the review using rigorous methods, pre-publishing our protocol and adopting PRISMA reporting standards. We searched in English and excluded papers where the full text was unavailable in English. This may have resulted in relevant literature in other languages being overlooked, particularly in non-Western contexts. We nonetheless identified studies from countries with different social and cultural dynamics, across five continents.

Whilst we focused on selected marginalisation experiences, there are likely to be implications for other populations, such as those marginalised by poverty or long-term unemployment, from minority ethnic groups, diverse sexual orientations, or different gender identities. However, the distinct relational influences on MH/SU help-seeking in each of these groups and others should be examined, in addition to where people have intersecting experiences of marginalisation.

Whilst scoping reviews often omit quality appraisal, we appraised SNA studies. It was possible to use MMAT, but it lacked detail for the interrogation of SNA elements. Development of a bespoke tool that can be used for studies adopting this method may be beneficial.

Not all full texts were screened by two independent reviewers as originally intended. At initial and interim team meetings, we determined that the level of consistency achieved between reviewers was

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sufficient to allow a single review of remaining papers. Additionally, extraction and synthesis were conducted by a single reviewer. Two reviewers at each stage may have added further rigour to the review.

Social capital is not the only social theory that may be relevant, and SNA is not the only way to study it. Future reviews could assess how other theoretical or methodological approaches have been applied to understand the relational influences on help-seeking for MH/SU among people experiencing social marginalisation.

CONCLUSION

Social capital can be useful in understanding the relational influences on help-seeking for mental ill-health and substance use among people experiencing social marginalisation, and social network analysis presents a useful method for examining social capital across the networks of people experiencing social marginalisation. Further theoretical elaboration and empirical work is needed, particularly to test whether aspects of social capital influence help-seeking, and whether this mediates or moderates health outcomes. Future work should take account of shared and distinct phenomena across different experiences of social marginalisation, to strengthen the conclusions that can be drawn and thus inform policy, practice and intervention development.

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Figure titles

Figure 1. PRISMA flow diagram

Figure 2: Numbers of papers published per year

Figure 3. Countries represented in included studies

Contributors

CC conducted conceptualisation, methodology, data curation, original drafting, visualisation, supervision, project administration and is guarantor. CC, DG, and RK conducted investigation and analysis supported by JG and MT. CC, DG, RK, JG reviewed and edited the final draft. CC and DG acquired project funding.

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Ethical approval

As a literature review, ethical approval was not required.

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Competing interests

CC, RK and JG are employed at the Salvation Army Centre for Addiction Services and Research (SACASR), University of Stirling. SACASR receives funding from The Salvation Army. The Salvation Army have no involvement or influence on this research. All other authors have no competing interest to declare.

Data availability statement

Data are available in the online supplementary file. Any further details are available from the corresponding author on reasonable request.

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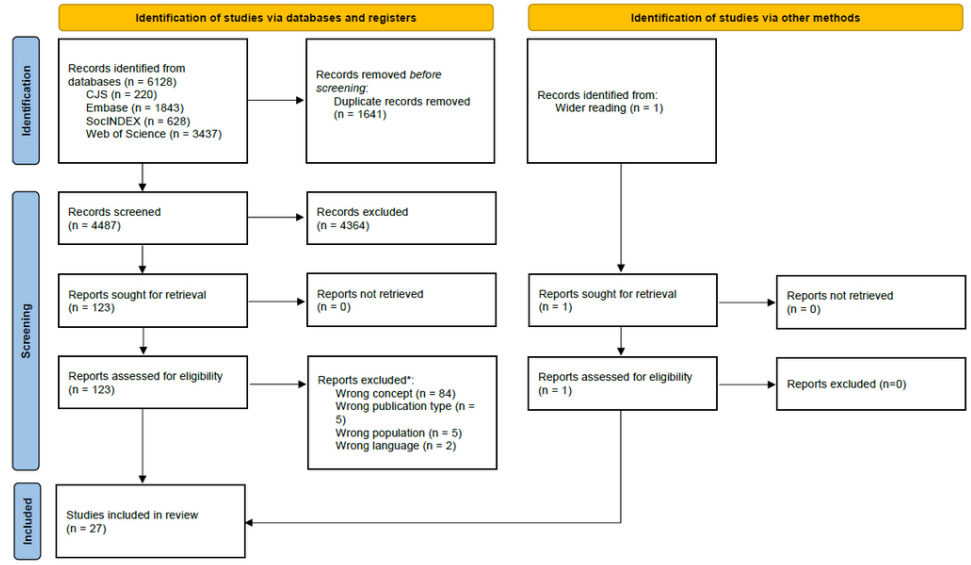

Figure 1. PRISMA flow diagram

228x149mm (118 x 118 DPI)

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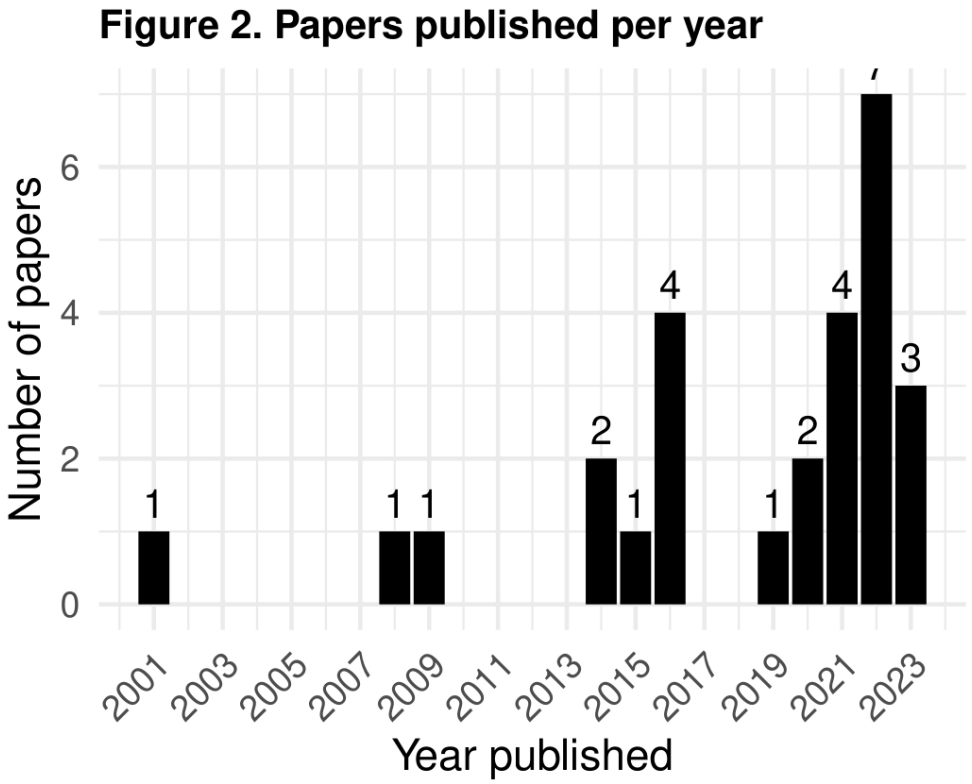

Figure 2. Papers published per year

707x574mm (38 x 38 DPI)

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Figure 3. Countries represented in included papers

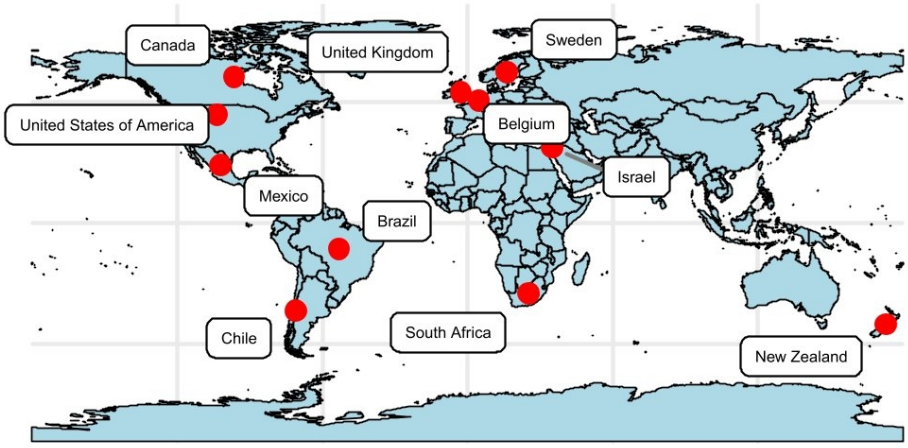

Figure 3. Countries represented in included papers

89x72mm (300 x 300 DPI)

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Supplementary file

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Search strategies

Criminal Justice Abstracts via EBSCO Host

#	Query	Limiters/Expanders	Results
S3	(S1 AND S2)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	220
S2	TI (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR SU (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR AB (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR KW (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	86,290

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S1	TI ("social network analysis" or "social capital") OR SU ("social network analysis" or "social capital") OR AB ("social network analysis" or "social capital") OR KW ("social network analysis" or "social capital")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	2,138

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EMBASE via OVID

Embase <1974 to 2023 June 26>

1	social capital.mp. or social capital/	6193
2	social network analysis.mp. or social network analysis/	3001
3	"substance use".mp. or "substance use"/	70073
4	"substance abuse".mp. or substance abuse/	76105
5	drug misuse/ or substance misuse.mp.	13383
6	addiction/ or addiction.mp.	153427
7	drug dependence.mp. or drug dependence/	78207
8	alcohol dependence.mp. or alcoholism/	133979
9	mental health.mp. or mental health/	401346
10	mental illness.mp. or mental disease/	293832
11	psychosis/ or psychosis.mp.	149976
12	schizophrenia.mp. or schizophrenia/	234078
13	depression/ or depression.mp.	852167
14	anxiety/ or anxiety.mp.	494771
15	"personality disorder".mp. or personality disorder/	54470
16	"eating disorder".mp. or eating disorder/	41607
17	post traumatic stress disorder.mp. or posttraumatic stress disorder/	83078
18	suicidal ideation/ or suicide/ or suicidal behavior/	102925
19	suicid*.mp.	161363
20	1 or 2	9129
21	3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19	2116872
22	20 and 21	1843

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SocINDEX via EBSCO Host

#	Query	Limiters/Expanders	Results
S3	(S1 AND S2)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	628
S2	TI (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR AB (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR KW (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”) OR SU (“Substance use” or “substance abuse” or “substance misuse” or “addiction” or “drug dependence” or “alcohol dependence” or “mental health” or “mental illness” or “psychosis” or “schizophrenia” or “depression” or “anxiety” or “personality disorder” or “eating disorder” or “post traumatic stress disorder” or “suicide” or “suicidal”)	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	181,460
S1	TI ("social network analysis" or "social capital") OR AB ("social network analysis" or "social capital") OR KW ("social network analysis" or "social capital") OR SU ("social network analysis" or "social capital")	Expanders - Apply equivalent subjects Search modes - Boolean/Phrase	11,717

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Web of Science

TS=("Social capital" OR "social network analysis")

AND

TS=("Substance use" or "substance abuse" or "substance misuse" or "addiction" or "drug dependence" or "alcohol dependence" or "mental health" or "mental illness" or "psychosis" or "schizophrenia" or "depression" or "anxiety" or "personality disorder" or "eating disorder" or "post traumatic stress disorder" or "suicide" or "suicidal")

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Table S1: Social capital papers

STUDY INFO								HELP SEEKING	HOW SOCIAL CAPITAL THEORY IS APPLIED					
First Author	Country	Population	Sample size	Age range (mean)	Sex/ gender	Ethnicity	Other	Help-seeking focus	Aim	Focus on social capital	Level studied (micro/meso/ macro)	Type studied	Theorists	Results relevant to help-seeking
Anderson et al. (2021)	UK (Scotland)	SU: peer-workers	10	Range 31-53 (median 41)	100% male	NR	Time in recovery, peer worker status	Incidental	Increase understanding of recovery capital and social identity using mixed methods social network analysis	Explicit	Terms not used	Explicit: Bonding and bridging	Framing: Putnam Cite: Network scientists	High bonding social capital within both drug using and recovery networks. Many participants were previously unsuccessful in accessing SU support, at a time when their networks were more characterised by bonding capital with other people who used drugs/alcohol (link to help-seeking not explicit). Some sought the stability of addiction services whilst others viewed services as unhelpful (due to limited opening, a perception that they were 'ticking boxes', and offering unwanted solutions).
Boeri et al. (2016)	USA	SU: Active and former drug users	29	Reported as age bands: 18-29 and 30+	48% female, 52% male	66% White, 31% African American, 3% Hispanic	Using 'hard drugs'.	Incidental	Understand how people with problematic drug use and low-socioeconomic status access social networks to gain positive social capital over the life course	Explicit	Terms not used	Explicit:	Framing: None Cite: Bourdieu & others	Limitations in treatment programs in providing wider bridging and linking social capital. This may reduce their impact and attractiveness to people to sustain engagement. By encouraging the sharing of experiences, and facilitating bonding social capital, they could sustain engagement. Family and friends were important sources from which to seek informal help, but without providing bridging/linking social capital, the impact of treatment could be short-lived.
Brookfield et al. (2019)	Lit review	SU: Methamphetamine users	NA	NA	NA	NA	NA	Incidental	Understand how to tailor support for methamphetamine users through meta-ethnography of experiences of cessation, recovery, and relapse	Explicit	Terms not used	Explicit: Bonding and bridging	Framing: none. Cite: Granfield & Cloud	Potential for strong bonding social capital acting as a constraint on actions for change and risking contagion of unhelpful behaviours. Social capital determines the options available to people using drugs, including access to support, information, guidance and resources. Social capital is not static.
Brown & Baker (2020)	UK (England)	MH: People who have received treatment	32	22-67 (NR)	47% female, 53 % male	NR	Occupational background, welfare benefit receipt,	Incidental	Explore recovery experiences beyond health and social care or focussed on symptom management	Explicit	Terms not used	Terms not used	Framing: none Cite: Bourdieu & others	By engaging in activities that consolidated a more rounded identity, people accessed and provided support in natural contexts. This was more attractive than seeking professional help, which some reported finding paternalistic or unhelpful. Participants noted that available friends and family was a privilege not shared by all. They made strategic choices about from whom and when they sought help to avoid 'bothering people too heavily'.
Cheney et al. (2016)	USA	SU: People using and not in treatment.	51	18-61 (36.1)	47% female, 53 % male	100% African American	Previously received treatment	Incidental	Understand how lifestyle and social network changes facilitate access to social capital needed to change cocaine use patterns, by exploring factors underlying African American cocaine	Explicit	Terms not used	Terms not used	Framing: Bourdieu	African Americans, particularly outside urban conurbations, experience personal, cultural, and structural barriers to accessing help and may rely on existing personal networks for help to a larger extent. They relate this to Bourdieu's ideas around the struggle for power, and their position in society that limits access to conventional social capital.

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									users' decisions to reduce or quit cocaine use				
Granfield & Cloud (2001)	USA	SU: People dependent on drugs/alcohol	46	Range NR (38.4)	40% female, 60% male	96% White	Addiction length, time in recovery, class backgrounds	Incidental	Examination role of social capital in self-recovery from alcohol- and drug-use problems	Explicit	Terms not used	Terms not used	Framing: none Cite: Bourdieu, Coleman, Putnam & others
Itzhaki-Braun & Gavriel-Fried (2022)	Israel	SU: People who formerly used drugs	14	21-45 (26.9)	100% male	100% Ultraorthodox jews	Addiction length, time in remission	Incidental	Understanding pathways of ultraorthodox Jews into and out of SU	Explicit	Terms not used	Explicit bonding (minor reference)	Framing: none Cite: Coleman, Putnam & others
Kirst (2009)	Canada	SU: people who use drugs	80	Range NR (42)	48% female, 52% male	NR	Income, education level	Incidental	Understand how social capital can influence risk and health behaviours of people who inject drugs and smoke crack	Explicit	Terms not used	Terms not used	Framing: Coleman Cite: Bourdieu, Putnam & others
Myers et al (2016)	South Africa	SU: alcohol and drug users	23 AOD users, 14 SPs	16-21 (18.7)	AOD users: 100% women. SPs: 64% female, 36% male	AOD users: 52% Black African, 48% 'coloured'	Marital status, employment status education level, weekly polysubstance use SPs: 5 health, 4 social welfare, 4 AOD treatment, 1 law enforcement	Incidental	Understand how the environment of poor young women who use alcohol or drugs informs access to and use of health services	Incidental	Terms not used	Terms not used	Framing: none Cite: none
Oliver & Cheff (2014)	Canada	SU: homeless young women	8	15-21 (18.4)	100% women	25% Caucasian, 13% West Indian, 13% South Asian, 13% Ojibwe, 13% Native Canadia	Sexual orientation, education level	Incidental	Explore how young women experiencing homelessness form attachments and accrue social capital outside of the nuclear family unit	Explicit	Terms not used	Explicit all	Framing: Putnam Cite: youth theorists

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						n, 13% Congolese, 13% Metis,								
Ondrasek et al. (2023)	Czech Republic	SU: Roma people	8	NR	NR	100% Roma	NR	Incidental	Explain high rates of self-recovery among Roma people who use drugs, within the socio-cultural context	Explicit	Terms not used	Terms not used	Framing: none Cite: Granfield & Cloud	Cultural norms in the minority Roma community in the Czech Republic can prevent help-seeking. Norms include more acceptance of SU, little interest in treatment services, less knowledge about safe and unsafe SU, mistrust of majority institutions and concerns about risk of losing contact with family. Often SU, when it reaches a level perceived as problematic by the community, collective decisions to intervene are made. Intervention is imposed, using the strong bonding capital within the community to coerce and monitor behavioural change.
Palombi et al. (2022)	USA	SU: people in recovery	64	NR	NR	Over 85% white (only focus group level data given)	Drug court participation, city/township population, household income	Incidental	Examining the construct of social capital for people in short- and long-term recovery from substance use problems living in rural communities	Explicit	Terms not used	Explicit	Framing: None. Cite: Granfield & Cloud	Participants held hope for help working, but fears about what a response may be that could prevent them seeking it. Some people initially mandated to attend could come to an appreciation of being held to account. Others were encouraged by a partner to seek help.
Perry & Pescosolido (2015)	USA	MH: People with a recent onset of mental illness	171	16-72 (30.6)	64% women	73% White, 27% Black	Diagnosis, psychiatric symptoms, education, living situation, employment status	Explicit	Examining factors associated with activating social toes for health-related discussion	Implicit	Terms not used	Terms not used	Framing: Lin (not explicit). Cite: others	Regular interaction partners = mean 15.5. Network partners with whom health issues are discussed = mean 3. Sample mostly had close ties (mean 2.64/3) with moderately high trust in physicians (mean 2.34/3). 20% of all alters are selected as health discussants suggesting selectivity. Ego age and higher levels of psychiatric symptoms associated with increased odds of health discussion. Among alters, age, having a mental illness and having first suggested seeking help were associated with increased odds of health discussion. Relationships characterised by closeness and frequent contact more likely to be activated, those with conflict/hassles/problems less likely. Mother and health professional more likely to be approached than friend or partner. A child or co-worker less likely than a friend. Greatest likelihood of approach is mother or partner. Health professional no more likely that father, sibling, friend or neighbour. Alters in larger networks less likely to be approached. Networks with higher levels of physician trust had greater odds of seeking help.
Pouille et al. (2021)	Belgium	SU: People in recovery - migrants and ethnic minorities	34	18-60 (38)	12% women, 78% male	Ethnicity NR (country of origin)	Range of substances, migrant generation	Incidental	Explore experiences of migrant sand ethnic minorities in recovery from problem substance use; personal, social, and community recovery resources that facilitate	Incidental	Terms not used	Terms not used	Framing: Granfield & Cloud	Participants described the people they could count on for help as understanding and honest, and it was these family members, partners, friends and peers they turned to. Some participants sought help from a religious deity. Participants described avoiding services when they thought there would be easily available substances, and some only made contact through an existing service.

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									recovery; and elucidate barriers to recovery				
Radcliffe & Stevens (2008)	UK (England)	SU: people who dropped out of treatment and service providers	53 drug users, 14 treatment staff	19-50 (Mean NR)	26% women, 74% men	75% White British, 8% Black British, 9% Mixed Heritage, 2% Asian British, 2% Traveller	Receipt of welfare benefits, employment status, time in prison for drug-related offences, drug treatment services mandated by court order.	Explicit	Exploring the relationship between shame and stigma, and engaging in treatment services	Explicit	Terms not used	Terms not used	Framing: none Cite: Granfield & Cloud	Treatment regimes risked exposing drug user status to others, thus threatening loss of social capital. Fear of losing social capital contributed to disengagement from treatment as heroin use allowed greater concealment and flexibility. Engaging with treatment tarnished the participants' sense of identity, associating them with 'other' drug users. This also risked their social capital, regardless of how much conventional social capital they had. Social capital exists among the drug using community. Participants expressed ambivalence towards this, but sustaining this social capital could conflict with treatment engagement. Service providers identified that status and identity associated with drug use was a draw to people with few other avenues to accrue social capital, and which could prompt disengagement.
Rijninket al. (2022)	Aotearoa New Zealand	SU: people who inject drugs	13 PWID 1 staff member	30-51 (mean NR)	43% female, 57% male	NR	Opioid substitution therapy status	Incidental	Explore experiences of people who inject drugs who rely on a needle exchange mobile outreach service	Incidental	Terms not used	NA (incidental social capital only)	Framing: none Cite: none	In disaster and emergency situations there may be a perception, or reality, that help for SU is not there to ask for. Participants described needing to know who key peer contacts were and that they could help, and the importance of keeping good relations so that they did not lose out when others were favoured. Barriers to seeking help were the judgement experienced and fear of reporting by pharmacy staff, and the need to protect one's identity and social status by not being seen accessing support.
Silva et al. (2021)	Brazil	SU: Homeless people who use crack cocaine	17 SUs, 4 staff (+ethnography)	22-53 (mean NR)	65% female, 35% male	94% Black or Brown	Monthly income	Incidental	Analyse characteristics of social support networks of individuals who used crack cocaine and supported by a Brazilian health program for people living on the street	Explicit	Explicit: Micro/macro	Terms not used	Framing: Lin Cite: Lin	Participants looked for help from specialist providers over psychiatric or family support. The important characteristics were friendliness. They also relied on emergency services.
Skogens & von grief (2020)	Sweden	SU: young adults post treatment	21	25-33 (29)	76% female, 24% male	NR	MH problems, relationship status	Incidental	Examine how recovery over five years was related to former alcohol and drug problems, other problems and processes of change	Incidental	Terms not used	NA (incidental social capital only)	Framing: Granfield & Cloud. Cite: Bourdieu & others.	Through engaging in treatment to resolve SU, some participants identified unmet MH needs. Recognition of previously obscured or un-acknowledge mental ill-health led to seeking MH support. Participants wanted to be taken seriously by people with MH expertise, seeking support outside the SU recovery community. The support most often desired was more 'ordinary' life support, that could be filled through social capital.
Smith et al. (2023)	UK (England)	SU: patients in harm reduction service	7	Early 20s to late 40s	29% female, 71% male	NR	Peer mentor status, time in recovery services	Incidental	Explore experience of recovery from problem substance using captured images and descriptions	Explicit	Terms not used	Explicit: Bonding and bridging	Framing: none Cite: Granfield & Cloud	Participants described isolation from potential sources of support, feeling alienated from any source of community or trusted confidents they could ask for help. Some experienced relief from 12-step-commuities where they could identify with others. Fear of relapse motivated continued engagement. Others expressed reluctance to reach out to people experiencing SU, and could experience alienation and exclusivity in 12-step

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													communities if they could not relate to the group. As they were already using services, workers encouraged help-seeking for other issues.
Timmer et al. (2022)	Literatur e review	People experiencin g multiple disadvantag e	NA	NA	NA	NA	NA	Incidental	Develop an integrated theory of health care utilisation for justice involved people experiencing multiple disadvantage	Explicit	Terms not used	Terms not used	Framing: none Cite: Lin, Bourdieu , Putnam	Argues that people released from custody (and experiencing multiple disadvantage) possess limited social capital and thus may lack knowledge about, and ability to navigate, the healthcare landscape to access care. This is exacerbated for racialised groups and potentially other minoritised identities, because of the intersectional disadvantages that impact accrual of social capital. They draw on a range of literature to propose this hypothesis and argue for the need for further testing of this model. They highlight the potentially reduced network size and thus fewer people to ask for support, return to areas where resources are limited, and stigma and racial discrimination as barriers.
Urada et al (2021)	Mexico	SU: female sex workers	195 for quantit ative part. Intervi ews with 16 profes sionals . Focus groups with 45 women	NR	100% Female	NR	NR	Incidental	Understand if assets-based community developments make a difference to the lives of sex workers.	Incidental	Terms not used	NA (incidental social capital only)	Framing: none Cite: none	Government providers present a negative view of the potential for help-seeking among women who use drugs, suggesting that people don't ask for help with SU, that they don't want help, and that they know and are fearful of societal rejection that can lead them to avoid going out. Potential of community empowerment initiatives to facilitate building of social capital in under-served areas or for people experiencing marginalisation.
Wienck e (2022)	Chile	MH: patients, and their relatives, neighbours, Mapuche healers, and psychiatric staff	27	NR	NR	NR	NR	Incidental	Learn about how social capital impacts people in mental health treatment	Explicit	Terms not used	Terms not used	Framing: Putnam Cite: Putnam	There are conflicts between the psychiatric and traditional approaches with churches having a strong influence and some churches actively discouraging consultation of traditional healers (machis). Although staff thought confusion may be a barrier, this was not seen patient interviews. In one example case, the person seeks help first from the machis in line with his beliefs, before family members enforced a psychiatric consultation. Other patients experienced pressure to stop accessing machi.
Woodall & Boeri (2014)	USA	SU: women who use/formerl y used methamphe tamine	30	19-51 (mean NR)	100% Female	87% White, 7% Latino, 3% African America n, 3% America n Indian	Income, employmen t status	Incidental	Examine how low-income women using methamphetamine the suburbs access resources, and how resources and networks impacts choices and outcomes	Explicit	Terms not used	Cited but not used	Framing: none. Cite: Bourdieu , Coleman , Putnam & others	For some women, seeking help relied on the material and practical support of others. This could be from people with their own difficulties, or a single person, that left a woman vulnerable should the relationship change. Women stopped looking for help after attempts had been unsuccessful. They grew used to having needs met in other places, which may or may not be healthy options. There was reluctance to talk about failed access attempts or lack of resources for fear of being seen to complain.

Abbreviations: AOD = alcohol or drugs, MH = mental ill-health, NR = not reported, SPs = service providers, SU = substance use

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Table S2: Social network analysis papers

STUDY INFORMATION								HELP-SEEKING	INSIGHTS GAINED THROUGH SNA							QUALITY
Reference	**Country**	**Population**	**Sample size**	**Age range (mean)**	**Sex/gender**	**Ethnicity**	**Other**	**Help-seeking focus**	**Aim**	**SNA type**	**Network features**	**Data collection**	**Data analysis**	**Results relevant to methods**	**Result relevant to help-seeking**	**MMAT**
Amadei et al. (2023)	Brazil	MH: Patients	16	22-59 (44)	38% female, 62% male	81% white, 13% brown, 6% black	Marital status, living arrangements, religion	Incidental	Analyse the structural characteristics, functions and attributes of the bonds in the users of the psychosocial care centre	Personal network Qualitative	Size Density Homophily Alters role Tie function	In person: Interview and network maps. File reviews. Institutional record review	Merging of network maps	SNA useful for understanding relationships and their functions (inc. help-seeking). Co-producing network maps a useful strategy.	People sought out relationships characterised by care, help, support, availability and commitment. Family were most commonly approached with professional service relationships second. Community mutual support was viewed positively, though not explicitly for MH support. They were experienced as places of care and belonging. There was an intersection between friends and service providers, with friendship sometimes attributed to professionals/religious leaders.	Lacks clarity in reporting analysis and how the qualitative data were integrated with the maps at individual and group level.
Anderson et al. (2021)	UK (Scotland)	SU: peer-workers	10	Range 31-53 (median 41)	100% male	NR	Time in recovery, peer worker status	Incidental	To expand the conception of recovery capital and social identity	Personal networks Mixed methods	Size. Density. Closeness. Homophily. Constraint. Transitivity. Betweenness centrality. Alters influence (negative/positive). Network size. Network density. Closeness (and mean closeness for network-level). Homophily (E-I Index measured on network-level). Constraint. Transitivity. Betweenness	In person: Interview and network maps.	Descriptive statistics. Variables converted to individual-level attributes for T-test and Z-test. Thematic analysis	Demonstrated change in networks over time of transition (recovery), which could inform optimal intervention planning. The relational focus alone may omit insights into structural factors	People attempting to maintain abstinence could experience guilt in relation to their social networks where others continued to use substances, implying seeking support could be more difficult in this context, A participant highlighted how prison had been an opportunity due to forced abstinence and access peer support indicating that help-seeking may be more difficult when services or peer support are not visible. The dense networks of people in recovery mirrored those of people still using substances. In the former the structure could be supportive in maintaining abstinence (and potentially accessing help, whilst the latter could both support and restrict recovery efforts.	Small sample and use of retrospective accounts of previous networks may result in recall bias. Limited details on the alter characteristic. Qualitative components are more robust than the statistical comparison.

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											centralisation.				
Fulginiti et al. (2016)	NR	MH: Outpatients with SMI	30 egos, 438 alters	Range NR (47.7)	57% female, 43% male	36.7% Non-Hispanic White, 46.7% Latino, 10% Multiracial, 6.7% African American	Marital status	Explicit	Describe patterns of suicidal disclosure and "examine associations between individual-level (e.g., social support, stigma) and suicidal disclosure and relational level factors (e.g., availability, closeness, homophily) and suicidal disclosure."	Personal Quantitative	Size Alters roles	In person: Interview and network maps	Bivariate analysis Multi-level models (alters level 1, egos level 2)	Multi-level modelling permitted novel understanding of disclosure practice taking account of individual and relational level factors Network maps assisted recall for completeness. Method could strengthen development of accurate (suicidal disclosure) profiles to inform treatment planning	77% had disclosed and 100% intended to disclose. People disclosed to only a proportion of their social networks (14%) and intended to disclose to 23%. Roughly 1/3 alters previously disclosed to would not be approached again, whilst 15% of network members were identified as new potential alters for disclosure (selectivity and change over time). Of individual factors, ethnicity remained a significant predictor of disclosure in multi-level models. Of relational factors prior disclosure, relationship type, relationship closeness, and all types of social support remained associated with disclosure in the multi-level models.	Methods detail is thin: unclear how the sample were recruited. Modelling description is unclear.
Fulginiti et al. (2022)	USA	MH: homeless young people	527 egos, 1318 alters	Range NR (21.0)	33.1% female, 55.3% male, 11.7% gender minority	22.9% Non-Hispanic White, 34.4% Black, 18.2% Latino, 24.5% Mixed/Other	Sexual orientation, education, homelessness duration, Traveller status, psychosocial variables, help-seeking variables	Explicit	Understand the prevalence and correlates of suicide-related disclosure in YAEH friendship networks at individual and relational level, consideri	Personal Quantitative	Size. Friend types. Friend genders. Homophily (gender identity and sexual orientation). Contact frequency. Social support (tangible and informational/emotional).	In person: survey via laptop (self-administered or assisted)	Bivariate multilevel analysis Multivariate multi-level models (alters level 1, egos level 2)	Finding relational level variables that can be modified to improve access to support overcomes the inconsistent individual level findings	Average friend network size was 2.5. 30% had disclosed to a friend in their lifetime. Of these, 45% made this during crisis, and 55% in retrospect. 21% of friends were disclosed to, and of these 45% were approached during crisis and 55% retrospectively (selectivity). Lifetime and concurrent disclosure were associated with lifetime history of unmet mental health needs and having friends who reliably offered social support	Well presented

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									ng concurrent and retrospective disclosure					(tangible and emotional/informational). Young people who identified as transgender or gender non-conforming were more likely to disclosure current suicidal thoughts. Post hoc analysis to compare friends with other relationships (family, provider, other) found no significant differences in disclosure patterns.		
Garcia et al. (2022)	Online	SU: People who use/formerly used opioids	4211 users (202 posts (44,103 comments)	NR	NR	NR	NR	Explicit	1) identify and describe advice-seekers on Reddit for buprenorphine-naloxone use using text annotation, social network analysis, and statistical modelling techniques. 2) predict advice-seeking	Whole Quantitative	Total degree. Eigencentrality. Closeness. Authority. Hub	Online: Webscraping tools used to extract relevant posts	Descriptive statistics. Mann Whitney and Chi tests with post-hoc comparisons (Benjamin-Hochberg). Generalised Linear Models	Combining individual and network factors produced the best fitting model for predicting advice-seeking in forum users	Advice-seeking posts were associated with people using (rather than formerly using) Buprenorphine. Advice seeking was associated with having fewer and less close social connections. Combining network and individual characteristics were better indicators of advice-seeking than either alone.	Well presented in terms of approach, although sample representativeness is unclear. Analysis is logical. Supplementary data presented reflecting good open science.
Kirst (2009)	Canada	SU: people who use drugs	80	Range NR (42)	48% female, 52% male	NR	Income, education level	Incidental	Understand how social capital can influence risk and health behaviours of injecting drug users and crack smokers - comparative examination	Personal Qualitative	Trust. Reciprocity. Companionship. Norms. Exchange of health information.	In person: Interview	Coding sensitised by the literature followed by development of themes.	Can demonstrate the complexities of social capital and the structural factors that influence decision making	See social capital section.	Well justified questions and data collection justified. Analysis lacks clarity about its deductive/inductive nature and the way the networks were analysed is not elaborated – but presents a coherent account of

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															the issues identified.
Perry & Pescosolido (2015)	USA	MH: People with a recent onset of illness	171	16-72 (30.6)	64% women	73% white, 27% black	Diagnosis, psychiatric symptoms, education, living situation, employment status	Explicit	1) Identify how ego, alter, relationship and network characteristics impact tie activation for health matters during early stages of mental illness. (also to assess impact of this on recovery - not relevant to this review)	Personal Quantitative	Size Proportion of women Proportion of kin Closeness Trust in physicians	In person: interview	Identify characteristics associated with activated health discussion ties using multilevel models (random intercepts) with alters at level 1 and egos at level 2	Allows analysis at multiple levels (ego, alter, and network)	See social capital section	Well reported with clarity on limitations
Silva et al. (2021	Brazil	SU: Homeless people who use crack cocaine	17 SUs, 4 staff (+ethnography)	22-53 (mean NR)	65% female, 35% male	94% black or brown	Monthly income	Incidental	Explore social support networks	Personal Qualitative	Number of people/institutions participants' network. Components linked to. Interaction type. Relationship strength/extent. Characteristics related to reciprocitie	In person: Interview. Ethnographic observation. Focus group.	Deductive coding considering micro and macro factors Graphic representation of network maps Content analysis	NR	Participants looked for help from specialist providers over psychiatric or family support. The important characteristics were friendliness. They also relied on emergency services.	Overall the paper is difficult to follow in terms of what was collected and how it was analysed in relation to the SNA aspect of the study

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											s. Boundaries from a group				

Abbreviations: ChiSq = chi-squared, MH = mental ill-health, NR = not reported, SU = substance use

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