



Editor's choice

Turning points, identity, and social capital: A meta-ethnography of methamphetamine recovery

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ABSTRACT

Background: Despite the increasing prevalence and distinct nature of methamphetamine-related harms, treatment models are limited, and relapse is common. Meta-ethnography has been increasingly used to synthesise qualitative health research and develop new concepts or theories. This meta-ethnography aimed to explore methamphetamine users' experiences of cessation, recovery, and relapse, to better understand how to tailor support for this population.

Methods: A systematic review was conducted of six electronic databases, supported by hand searches of leading journals and reviews of reference lists. Reports were included that used naturalistic participant observation to examine methamphetamine cessation, recovery, and relapse with at least 50% of their sample. The life course approach to drug use was used to inform the process of data analysis and interpretation. The final sample was synthesised using Reciprocal Translation supported by open and axial coding.

Results: Nineteen sources were selected, thirteen of which were conducted in the United States. Two themes were identified: methamphetamine users are exposed to a range of relapse triggers, but also triggers for recovery, and their susceptibility to these triggers is largely determined by their social environment; and the process of recovery requires changes in personal and social identity which can be a barrier to recovery for some users.

Conclusion: These findings present the concept of recovery triggers and highlight the role of wider risk environments in determining methamphetamine recovery, and the negative potential of social capital. These themes also address the ongoing debate regarding the agency of drug users, and the impact of this debate on drug user's experiences of recovery.

Introduction

Methamphetamine use is being increasingly recognised as a significant public health issue (UNODC, 2015). Population growth has contributed to a 37% increase in disability adjusted life years attributed to amphetamine dependence between 1990 and 2010 (Degenhardt et al., 2014). This burden of disease includes acute behavioural disturbances, blood-borne and sexually transmitted infections, and impacts on cardiovascular-health (Buchacz et al., 2005; Gonzales, Mooney, & Rawson, 2010; Kaye, McKetin, Duffou, & Darke, 2007; Lecomte, Dumais, Dugre, & Potvin, 2018; McKetin, Dunlop et al., 2013; McKetin, Lubman, Baker, Dawe, & Ali, 2013). After rising dramatically throughout the 1990s worldwide, prevalence of methamphetamine stabilised in the mid-2000s, followed by another escalation since 2010 (Degenhardt et al., 2014, 2016; Degenhardt et al., 2017; UNODC,

2015). Increased prevalence of methamphetamine is also observed within marginalised populations such as men who have sex with men (MSM) (Leonard, Dowsett, Slavin, Mitchell, & Pitts, 2008; Prestage et al., 2018), sex workers (Hunt, 2012; Lasco, 2017), and people without stable accommodation (Feng et al., 2013), thereby acting to foster and compound their marginality and social challenges.

Despite the escalation of methamphetamine use and related harms, methamphetamine-specific pharmacological interventions and psychotherapeutic treatments are limited (Petit, Karila, & Chalmin, 2012). Some methamphetamine users find treatment services to be too focused on opiates or alcohol (Pennay & Lee, 2009), and report that the challenges of stopping methamphetamine use are different from other substances (Lyons, Chandra, & Goldstein, 2006). The role psychostimulants can play in enabling users to fulfil social, occupational, and familial functions (Dixon et al., 2015; Lasco, 2018; Nettleton, 2010)

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also presents additional barriers when transitioning to life in recovery. Many users also report how methamphetamine use can become closely entangled with sex and sexual identity (Green, 2016; Lea et al., 2017; Lyons et al., 2006; Shrem & Halkitis, 2008), fulfilling a particularly complex function for some MSM as a tool for managing internalised homophobia, stigma, and distress related to HIV diagnoses (Halkitis, Mukherjee, & Palamar, 2008; Shoptaw, Peck, Reback, & Rotheram-Fuller, 2003). The process of ceasing methamphetamine use is distinct therefore from other major illicit substances and requires tailored support and intervention.

Methamphetamine users also have a significant incidence of relapse post treatment (Brecht & Herbeck, 2014; Chen, Chen, & Wang, 2015; McKetin, Dunlop et al., 2013, 2013b; McKetin et al., 2012; Mooney et al., 2009). Trials of psychosocial treatments for methamphetamine use have observed non-abstinence rates of 61% at six-month follow up (McKetin, Dunlop et al., 2013, 2013b), or 69% within 12-week programs (Chen et al., 2015). In a three-year follow-up post psychosocial treatment, Mooney et al. (2009) found 78% of their 301 participants had continued to use. McKetin et al. (2012) found a relapse rate of 70% one year post rehabilitation. This study compared 112 methamphetamine users undergoing community-based withdrawal, 248 in residential rehabilitation, and 101 receiving no treatment. The authors found that whilst both treatments had a significant short term effect on reducing methamphetamine use, at three years it produced no significant effect over the no treatment group (McKetin et al., 2012). Multiple relapses are related to increased drug-related harms for users (Simon, Dacey, Glynn, Rawson, & Ling, 2004), and also impose a much greater burden on health services providing successive treatment episodes. There is clearly a need, therefore, for a more in-depth understanding of methamphetamine users' experiences of cessation, recovery, and relapse, to inform more effective treatment and management strategies and to reduce the disease burden and social and economic costs of methamphetamine use.

Meta-ethnography

Originally formulated by Noblit and Hare (1988), meta-ethnography is a method of synthesis particularly suited to developing conceptual models and theories and has become a prominent method for integrating qualitative healthcare research (Ring, Ritchie, Mandava, & Jepson, 2011). Rather than a logical positivist approach which values the accumulation and summarising of quantified knowledge, the purpose of meta-ethnography is to inductively interpret the totality of the research under review and identify additional concepts that can explain all the data. By engaging in an inductive and interpretive process of mutual translation between studies, meta-ethnography mirrors and productively extends the qualitative methods of its sample (Britten et al., 2002; Noblit & Hare, 1988). This paper presents the results of a systematic literature review and meta-ethnography of ethnographic research investigating the process of cessation, recovery and relapse for methamphetamine users. *Ethnography is a long established and effective research method for understanding the reality of illicit drug use as a social process (Bourgois et al., 2006; Preble & Casey, 1969), shaped by the social, political and cultural contexts in which it occurs (Maher & Dertadian, 2018). Ethnography has been utilized to understand important developments in the manufacture, use, and effects of methamphetamine (Boeri, Gibson, & Harbry, 2009; Reback, 1997). Meta-ethnography was chosen as the method for this review as it is specifically designed to synthesise ethnography and potentially identify insights not available from other kinds of qualitative research. This approach to synthesis was also intended to expand the limited amount of theory concerning methamphetamine recovery, as the techniques of meta-ethnography are directed towards the development of new concepts and understandings (Ring et al., 2011).*

Conceptual framework

This review was informed by a developmental life course approach (Hser, Longshore, & Anglin, 2007). Criminologists Laub and Sampson (1993) originally applied a life course approach to understand crime in a way that accounted for the rich and diverse changes in identity and behaviour that occurred across the life course, rather than attempting simple, linear predictions based on childhood experiences (Laub & Sampson, 1993). Hser et al. (2007) systematically applied this approach to trajectories of drug use as a way to update and expand the concept of 'drug use career' (Becker, 1953), which they considered an insufficiently neutral term that excluded too much of the historical context and interplay between personal and environmental factors when characterising drug use.

According to Hser et al. (2007), a life course approach utilises three concepts to understand the heterogeneity of drug use trajectories: transitions (between social roles, developmental stages), turning points (abrupt or gradual shifts in trajectory), and social capital (social connectedness as a resource). Transitions refer primarily to progression through developmental stages, and between various socially constructed identities associated with these stages. For the drug user these identities include patient, addict, friend, 'scenester' or partygoer, offender, reformed deviant, parent, and partner among others. Another distinctive feature of the life course approach is the dynamic process whereby these broader transitions in social roles and identity can provoke turning points in behaviour (Sampson & Laub, 2005). Turning points are discrete periods of time which are seen as instrumental in subsequent enduring behaviour change (Hser et al., 2007). The third component of the life course approach, social capital, is the individual's access to resources and support through shared connections and is a marker of social integration (White & Cloud, 2008). Social connections are also considered a form of social control, partly determining whether people engage in maladaptive behaviours such as crime or harmful drug use (Laub & Sampson, 1993).

The life course approach was used in this meta-ethnography to frame the process of coding the data. Codes were developed whilst attending to possible examples of transitions and turning points across the methamphetamine use trajectory. This framework also provided a lens for interpreting the findings of the review, and themes were structured around the concepts of transitions, turning points, and social capital. In this way the life course approach provided a structure for combining and extending the themes and concepts within the original sources.

Methods

The seven stages of meta-ethnography developed by Noblit and Hare (1988) were adapted into a model that gave equal emphasis to the process of systematic review, critical appraisal, and the data extraction and analysis process. This five stage process is displayed in Table 1, alongside Noblit and Hare's (1988) original model.

Non-systematic search and inductive review

The first stage of the synthesis entailed a non-systematic collecting of ethnographic accounts of methamphetamine use, using basic search terms such as 'methamphetamine' and 'ethnography' via the university library search engine. The initial purpose of this first pass was to determine whether there were enough ethnographic sources addressing methamphetamine use to enable a meta-ethnography. There is no clear guideline regarding this decision, as meta-ethnographies have been conducted on as few as four papers (Britten et al., 2002). The second purpose was to establish a basic familiarity with the available evidence in order to begin developing research questions. Other qualitative syntheses have used a similarly iterative and inductive approach to developing research questions (Dixon-Woods et al., 2016; Ring et al., 2011).

Table 1
Comparison of original steps of meta-ethnography to meta-ethnography process used for methamphetamine use.

Steps of the Meta-Ethnography (Noblit & Hare, 1988):	Steps of the Meta-Ethnography for Methamphetamine Use
1. Getting Started – determining research question that could be informed by qualitative research	1. Getting Started a. Non-systematic search b. Inductive review c. Research question development
2. Deciding what is relevant to the initial interest a. Defining the focus of the synthesis Inductive review b. Locating relevant studies c. Inclusion decisions Quality assessment of included studies	2. Systematic Search
3. Reading the studies	3. Critical Appraisal
4. Determining how the studies are related	4. Data Extraction a. Open coding b. Axial coding
5. Translating studies into one another	5. Analysis & Synthesis a. Reciprocal Translation b. Line of Argument
6. Synthesising translations	synthesis
7. Expressing the synthesis	

On the basis of the preliminary review the following research question was developed: what are the personal, social, and structural factors that influence the trajectory of methamphetamine use cessation, recovery, and relapse for recreational, functional, and dependent users?

Systematic Search

The systematic search phase of this synthesis adhered to the Preferred Reporting Items for Systemic Reviews and Meta-Analyses (PRISMA) (Moher, Liberati, Tetzlaff, Altman, & Group, 2009).

Inclusion criteria

This synthesis included original peer-reviewed literature and university theses available via electronic databases, that used ethnographic methods to address the trajectory of methamphetamine use, cessation, recovery, or relapse. Mixed methods studies were included where data derived from ethnographic methods was reported. Whilst meta-ethnography has been used to synthesise multiple forms of qualitative data, this review was focused on the results of ethnographic methods. In addition to keeping with the original purpose of meta-ethnography, ensuring methodological consistency between sources allows for a simpler process of data analysis to be conducted on a more homogenous sample of data. Studies were included in which more than 50% of the sample reported methamphetamine as a primary drug of concern. This was done to ensure that experiences related to methamphetamine use played a significant role in the author's findings, analyses, and discussion. In sources where findings were not specifically related to methamphetamine use and where the proportion of the sample who were primarily methamphetamine users was low, it was difficult to determine whether these findings related to methamphetamine and therefore the sources were excluded.

Sources were excluded where the text was not available in English. Conference abstracts and grey literature were excluded to limit the review to peer reviewed research. The search was also restricted to reports that specified the use of methamphetamine by participants, excluding use of amphetamines or other psychostimulants. The review did not exclude sources on the basis of epistemological assumptions or theoretical positioning.

Search strategy

Systematic searches were performed on six databases from their inception to 28 February 2018. The following were selected as the leading databases for qualitative research in drug use and addiction: APA PsycNET, CINAHL, EMBASE, PubMed, Sociological Abstracts, Web

of Science, and ProQuest Dissertations and Theses Global. A broad search strategy was utilised to overcome common issues with database searches of qualitative research. The complexity and variety of qualitative research can lead to inadequate indexing of qualitative papers (Bronson & Davis, 2011; Ring et al., 2011), and findings relevant to the review can be hidden within participant quotes and discussion sections. Research tactics such as participant observation may also not be referred to as ethnography in final reports. The search therefore included medical subject headings (MeSH) terms and simple word searches for 'methamphetamine', 'anthropology', 'ethnography', 'qualitative', and 'qualitative research.' In addition, the same search terms were used in a review of the first 20 pages of Google Scholar, as it has been shown to be a reliable search engine when conducting systematic reviews (Bramer, Giustini, & Kramer, 2016; Gehanno, Rollin, & Darmoni, 2013). In addition to the use of broad-based search terms described above, hand searches were also made of the *International Journal of Drug Policy*, *Contemporary Drug Problems*, and *Qualitative Health Research* for the years 2008–2018.

A title and abstract review was conducted on the results of the database search to exclude quantitative research, and those reports not addressing methamphetamine use. This smaller sample was then subjected to a full text review to identify sources using ethnographic research methods. The precise definition of ethnography is contested (Hammersley & Atkinson, 2007), therefore the criteria for this review focused narrowly on methodology. Sources were included that used naturalistic participant observation to explore methamphetamine use, a method which has been considered a 'diagnostic feature of ethnography' (Agar, 2008, p. pp. 9; Shah, 2017). This stage of the review also evaluated whether more than 50% of each sample used methamphetamine. A final full text review was then conducted to select sources that specifically addressed issues related to the trajectory of methamphetamine use cessation, recovery, and relapse. Searches were also made of the reference lists of each source included in this final sample.

Critical appraisal

The critical appraisal guidelines for qualitative research developed by the National Institute for Health and Care Excellence (2012) were applied to evaluate the methodological rigor of the final sample. These guidelines were selected as they had been used in previous reviews focusing particularly on marginalised populations (Lorenc et al., 2011; Lui et al., 2017). A checklist approach was selected to provide a clear explanation of decisions made by the reviewer during critical appraisal (Dixon-Woods et al., 2007). One of three quality scores could be applied (+ +, +, or -), to indicate whether all, some, or very few of the criteria were fulfilled by each article. The results of this critical appraisal are included in Table 3.

Data extraction

Descriptive data were extracted from the original studies into a table that recorded the authors, title, year of publication, research aims, methods, analysis, and stated limitations. Following Phase 3 and 4 laid out in Table 1, the final sample was then arranged in chronological order of publication, and initially repeatedly read through in depth (Noblit & Hare, 1988). This process revealed that the thematic headings within the selected sources did not capture all the findings that were related to participant's trajectories of methamphetamine use. A process of line-by-line coding of each article was adopted to extract all data relevant to the research question into another searchable table. The final table contained 584 separate quotes extracted from the results and discussion sections of the studies.

Data analysis & synthesis

Quotes that had been extracted into the searchable table were initially subjected to an open coding process using a constant

comparative approach (Heath & Cowley, 2004). The axial coding process was used to identify relationships between these open codes, and was informed by the conceptual framework of transitions, turning points, and social capital (Hser et al., 2007). These codes were collected into a taxonomic analysis (Sandelowski & Barroso, 2003) and arranged along the trajectory of methamphetamine use, presented in Table 2.

The role of meta-ethnography is the development of *third order constructs*, which go beyond the first-hand accounts of research participants and the second-hand theories derived by researchers, to develop constructs that have explanatory power across a range of research findings focusing on a particular topic (Schütz, 1962; Thorne, Jensen, Kearney, Noblit, & Sandelowski, 2004). Third order constructs are arrived at via a process of Reciprocal Translation. Beginning with one paper, Reciprocal Translation attempts to understand that paper's findings in terms of another related paper, working iteratively through the sample to develop a theory or concept (Melendez-Torres, Grant, & Bonell, 2015). For this review, the results of Reciprocal Translation were combined with the open and axial codes to develop a line of argument that synthesised and developed the descriptive and analytical findings of the selected sources into third order constructs.

Results

The results of the systematic literature search are summarised in Fig. 1. The initial search yielded 840 search results. Title and abstract review resulted in a sample of 137. Hand searches provided one additional article (Lasco, 2017). These 138 studies were subjected to a full text review which yielded a sample of 50. A final full text review was then conducted to select sources that specifically addressed the trajectory of methamphetamine use. This brought the sample to 30 reports from 25 studies. Reference list searches resulted in two more articles being included (Pach & Gorman, 2002; Reback, 1997). Of this sample, 19 were found to relate to cessation, recovery, or relapse into methamphetamine use. Two papers were excluded after completing the open coding process ((2015b, Gideonse, 2015a) as they were based on a PhD thesis also included in the sample (Gideonse, 2013), and did not present any additional findings or discussion not contained in the thesis.

Study characteristics

The final 18 sources were published between 1997 and 2018. Descriptive characteristics are displayed in Table 3. Thirteen of the 19 sources were derived from studies conducted in the United States. The remaining studies were conducted in Australia (Green, 2016; Pennay, 2015; Slavin, 2004), Canada (Fast, Small, Krusi, Wood, & Kerr, 2010; Fast, Kerr, Wood, & Small, 2014), and the Philippines (Lasco, 2018). In addition to participant observation, 16 sources utilised semi-structured interviews. Four papers also report findings from focus group discussions (Gorman & Carroll, 2000; Gorman, Barr, Hansen, Robertson, & Green, 1997; Lasco, 2018; Reback, 1997). Two papers included a quantitative survey in their study design (Lamonica & Boeri, 2012; Lyons et al., 2006) and the book by Haight, Ostler, Black, and Kingery (2008) included psychometric testing of children from methamphetamine-involved families.

Most sources used general samples of methamphetamine users aged 18–50 years. Five papers focused on methamphetamine use among MSM (Gideonse, 2013; Gorman et al., 1997; Lyons et al., 2006; Reback, 1997; Slavin, 2004), and two studies focused exclusively on female methamphetamine users (Nettleton, 2010; Stemmler, 2012). The book by Haight, Ostler, Black, & Kingery, 2008; focused on the impact of methamphetamine use of the children of users. Two studies primarily reported on recreational, rather than dependent use (Green, 2016; Pennay, 2015), and one study focused on functional and recreational use (Lasco, 2018). Garriott (2008) was the only study to include data from people other than methamphetamine users, such as relatives,

health care workers, and law enforcement officials. Three studies explicitly adhered to a Grounded Theory approach (Green, 2016; Lamonica & Boeri, 2012; Stemmler, 2012), with others reporting a range of methods including Constant Comparative Analysis (Boshears, Boeri, & Harbry, 2011), Holistic Analysis (Currie, 2003), Thematic Analysis, (Fast et al., 2010), and Thematic Content Analysis (Pennay, 2015). Twelve remaining sources did not report a specific data analysis approach.

Findings

The sources in this review addressed many facets of cessation and recovery. These have been summarised for this review into two main themes: the significance of wider risk environments in supporting drug use-related decisions (Turning Points and Environment), and the identity transitions entailed in the recovery process (Identity Transitions). These two themes were considered to be the most significant third order constructs derived from the reciprocal translation process that captured important aspects of each study. Due to the open-ended nature of ethnography, the reviewed studies naturally included many other findings related to methamphetamine recovery such as the challenges of persisting with abstinence, and experiences of treatment centres and services, which are illustrated in Table 2.

Turning points & environment

Relapse triggers

A trigger is an environmental stimulus which can provoke strong emotions or cravings for abstinent drug users, thereby contributing to relapse (Bruehl, Lende, Schartz, Sterk, & Elifson, 2006; Marlatt & George, 1984). Participants in these studies experienced multiple turning points, including a variety of relapse triggers such as people, places, objects, music, social isolation, and activities such as sex and dancing (Fast et al., 2010; Garriott, 2008; Gideonse, 2013; Lyons et al., 2006). Lyons et al. (2006) in particular observed how among a sample of MSM, group norms of frequent sex with multiple partners aided by drug use had made sex of any kind in recovery a potential relapse trigger. One of the most prevalent causes for relapse within this sample was reconnection with drug using social contacts (Boshears et al., 2011; Fast et al., 2014; Garriott, 2008; Stemmler, 2012). Many participants cited the importance of moving to a different area away from former social connections as a method of promoting and protecting recovery (Haight et al., 2008). Undergoing in-patient or residential rehabilitation was one means of accomplishing this. When these programs ceased, however, those who had not developed a new social support network that embraced sobriety found drug use impossible to avoid (Currie, 2003; Fast et al., 2010, 2014).

Cessation triggers

The decision to stop using methamphetamine was frequently described as a clear and conscious decision. This was attributed in some cases to a growing recognition of the escalating harms associated with their drug use (Currie, 2003; Fast et al., 2010; Haight et al., 2008; Pennay, 2015; Slavin, 2004). Among young recreational drug users in Australia, a process of 'ageing out of it' was described, where the social, physical and financial costs of use started to compete with other goals socially expected at their stage of life, such as engaging in long term relationships, buying property, and advancing careers (Green, 2016; Pennay, 2015).

For some engaging in heavy or dependent use, the realisation that they needed to stop using methamphetamine was described as a sudden realisation, or epiphany (Brown, 2010; Currie, 2003; Nettleton, 2010). The catalysts for participant's epiphanies could be small occurrences: meeting an old friend, or looking over at their child whilst engaged in

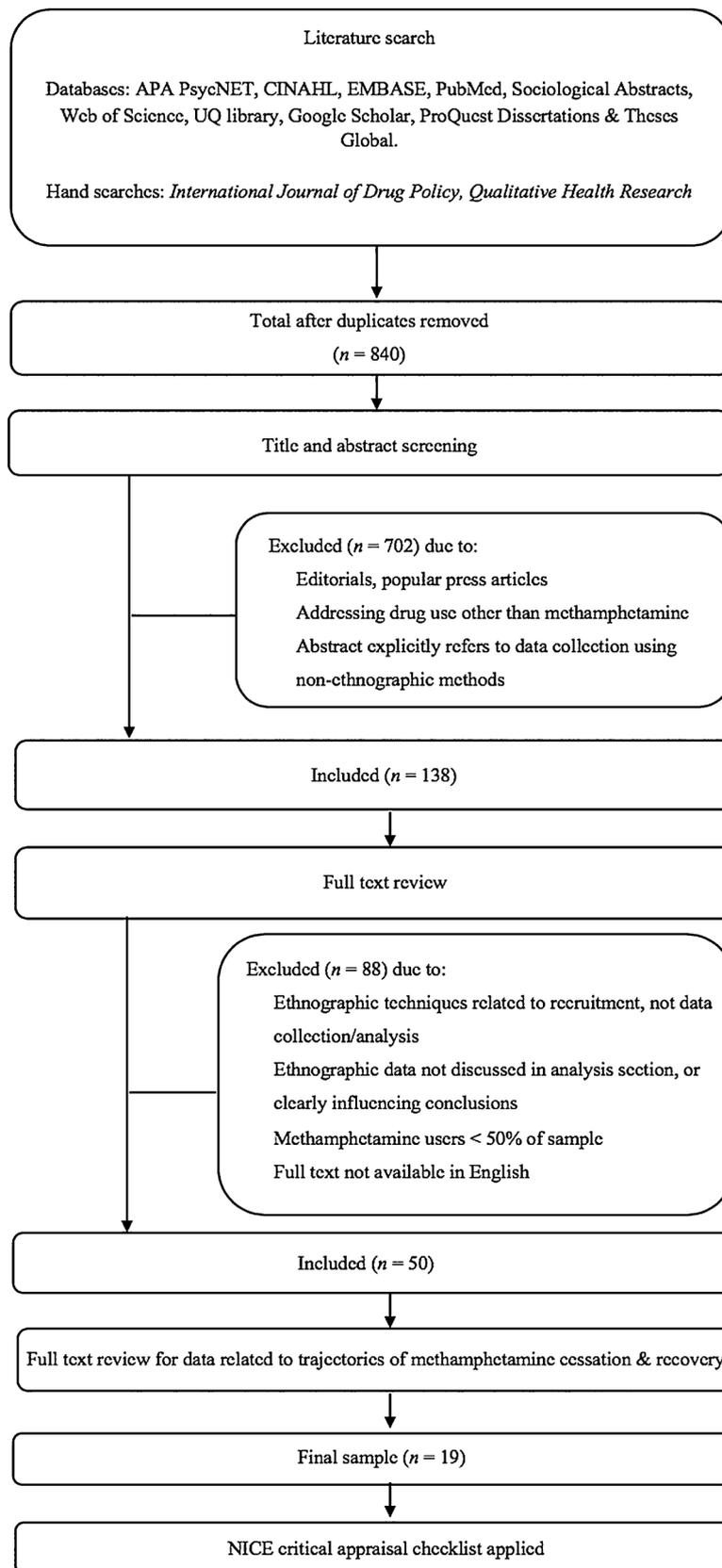


Fig. 1. Results of systematic database search for ethnographic research related to methamphetamine cessation, recovery, and relapse.

Table 2
Taxonomic analysis of methamphetamine use cessation, recovery, and relapse.

Code	Incidence of Code
Cessation Triggers	40
Epiphany	4
Pregnancy	3
Concern for children	2
Increased mental clarity	4
Increasing negative effects of drug use	6
Sudden loss of income	2
Desire for stability	4
Moved location	3
Isolation from user/social network	2
Loss of access to methamphetamine	1
Pressure from family	4
Barriers to Cessation	
- Cost of emergency services	3
- Stigma associated with being identified as a methamphetamine user	1
- Lack of social capital	2
Loss of pleasure from methamphetamine use	1
'Ageing out of it'	2
Transition to intermittent use	2
Recovery Factors	52
Motivated by reunification with children	1
Motivated to avoid prison	1
Psychological withdrawal effects	4
Protective factors	
- Support from employer	2
- Pregnancy	1
- Inaccessibility of methamphetamine	1
- Support from family	3
- Support from peers	1
Complicated by concept of self-responsibility vs. self-blame	11
Incarceration as pathway to recovery	10
Traditional Narcotics Anonymous groups not effective	1
High relapse rate observed by law enforcement	1
New social networks	3
Willpower	1
Group support meetings	3
Residential treatment	
- Limited availability	1
- Valuable respite from chaos	6
- Treatment centre also chaotic	1
- Overly structured	3
- Manages withdrawal, not cure	1
- Multiple treatment episodes	1
Requiring daily effort	4
Continued use of other substances	1
Desire to recover/increased self-esteem	1
Dependent on addressing wider context of exclusion	2
Need to address unprocessed trauma	1
Relapse Triggers	14
Leaving residential treatment	2
Sexual encounters	3
Location	1
Music	1
Drug use Paraphernalia	1
Drug-using associates	2
Trauma	1
Occupational – Stress	1
Lack of follow up support	3

the act of use (Nettleton, 2010). Brown (2010) recounts the experience of Candy, a 23-year old woman who reports sitting up in bed in the middle of the night and thinking clearly to herself 'I don't want to do this no more....' Descriptions of these decisions were similar to user's accounts of relapse and seemed to be describing a phenomenon of 'cessation triggers.' While the process of recovery from drug dependence entails prolonged and sustained effort, the discrete turning points at which drug users decided to abstain from or resume drug use also could seemingly be dictated by subtle or even unknown factors.

Context of the trigger

Throughout these experiences of turning points in the form of triggers, the recurrent theme was the dual significance of not only the triggers themselves, but the wider contexts in which they occurred. Whether the triggering stimuli actually caused the participant to undergo a turning point was closely connected with their access to social capital, which is understood as their ability to access psychosocial, physical, and financial resources through social connectedness (Granfield & Cloud, 2009; White & Cloud, 2008). Positive social capital can act as a protective factor, reducing vulnerability to personal, social, and structural issues such as mental health, violence and abuse, or access to healthcare. In Haight et al. (2008) mothers with experience of methamphetamine use found the support of family members instrumental to their recovery. Young participants on the streets of Vancouver who attempted to cease using methamphetamine were repeatedly re-immersed in a neighbourhood and social structure that limited their alternatives to participating in drug using communities in terms of pleasurable activities, social connection, and making money, thereby prolonging and exacerbating their drug use (Fast et al., 2010).

Slavin (2004) also observed a class difference among his gay male participants in Sydney, Australia, where the desire to cease using was partly provoked by the impact of methamphetamine on general functioning, which was in turn mediated by participant's ability to manage and conceal their use in work and social settings. Primarily functional methamphetamine users in the Philippines were embedded in a social and economic environment that made drug use adaptive and socially desirable (Lasco, 2018). The need to work longer hours in difficult jobs and limited options for pleasure and enjoyment drove a higher tolerance for risk and a fatalistic attitude towards the outcomes of methamphetamine use. In the absence of other supports for behaviour change, turning points in their drug use were influenced by access to money or incarceration, rather than personal choices.

Alternatively for one young woman in the United States, her decision to abstain occurred in the context of having a supportive partner and mother who enabled her to act effectively on that decision (Brown, 2010). Another participant experienced an 'epiphany' that they needed to recover, and their employer was able to assist them to access a withdrawal unit the next day (Nettleton, 2010). One participant in recovery, a woman in her late twenties, developed a social network of non-drug using friends and was able to manage triggers in her environment (Garriott, 2008).

Recognition of the risk and protective factors that make up the wider environment for these methamphetamine users gives more context to the classic turning points of cessation and relapse observed in many illicit drug user's biographies (Rhodes, 2002). Exposure to stimuli that might inspire thoughts of cessation or relapse could have had a reduced impact in a social context of close friends still actively engaged in drug use or engaged in recovery. These social networks preserved behavioural norms and increased the social cost of changing drug use behaviours, thereby acting to potentiate recovery or relapse triggers, or to blunt their effect.

Identity transition

Personal identity & responsibility

Multiple identity transitions were observed among participants in these studies. The primary transition was into the 'addict' identity, which many therapeutic models initially require, before the individual can engage in the process of recovery (Frings, Collins, Long, Pinto, & Albery, 2016). This shift in self-concept was required to facilitate the narrative of personal failure often used to explain harmful drug use. Garriott (2008) noted how one participant, Christie, attempted to share her story of methamphetamine recovery with school groups but felt constrained by this narrative, which obscured other factors such as her

Table 3
Descriptive details and quality NICE score of ethnographic sources addressing trajectories of methamphetamine cessation and recovery.

Author	Year	Country	Methods	Aims	Sample	NICE Quality Score
Boshears, Boeri & Barby	2011	U.S.A.	Semi-structured interviews Ethnographic fieldwork Constant comparative analysis	Explore relational aspects of drug use.	Methamphetamine users (n = 211)	++
Brown	2010	U.S.A.	Semi-structured interviews Ethnographic fieldwork	Explore how local frames of masculinity in Appalachia may help motivate methamphetamine use, and how cessation of methamphetamine use is tied to transformative life experiences.	Appalachian youth (n = 49), including methamphetamine users (n = 4)	++
Currie	2003	U.S.A.	Semi-structured interviews Informal participant observation Holistic analysis	Understand the ways in which the treatment experience interacts with the broader context of family life, school experience, relations with peers, and prior substance use treatment, to produce the trajectory that the adolescent followed during and after residential care.	Poly-drug users (n = 12)	+
Fast, et al.	2010	Canada	Semi-structured interviews Ethnographic fieldwork	Examine young people's understandings of how their drug use evolved over time in the context of the downtown Vancouver drug scene.	Poly-drug users aged 14–16 (n = 38)	++
Fast, et al.	2014	Canada	Semi-structured interviews Ethnographic fieldwork	Explore the ways in which youth articulated their initiation into meth use, increases or decreases in their use, and/or the decision to stop using meth.	Poly-drug users, age 14–30 (n = 100)	++
Garratt	2008	U.S.A.	Thematic analysis Ethnographic fieldwork	Examine the policing of methamphetamine by citizens in response to raised awareness about the signs of production; the construction of the addict as a criminal type; the incorporation of drug detection into administrative duties by institutions; and how methamphetamine users have been arrested, prosecuted, and punished.	Methamphetamine users. Family members. Health care workers. Law enforcement officers.	+
Gideonse	2013	U.S.A.	Ethnographic fieldwork Ethnographic interviews	Describe and deconstruct how cultural discourses are involved in constructing the subjectivities of HIV and MSM who use methamphetamine and live in San Diego.	MSM/methamphetamine users (n = 14)	++
Gorman, et al.	1997	U.S.A.	Ethnographic fieldwork Focus group interviews Unstructured, semi-structured, and structured interviews	Understand the beliefs, behaviours and rituals associated with HIV risk, and provide preliminary data about those who are at dual risk for HIV due to MSM status and injection drug use.	MSM intravenous drug users (n = 30)	-
Gorman & Carroll	2000	U.S.A.	Semi-structured interviews Ethnographic fieldwork	Understand patterns of user behaviours, contexts of use, social interactions, and service needs.	Methamphetamine users aged 20–56 (n = 103)	-
Green	2016	Australia	Focus group discussions Semi-structured interviews Ethnographic fieldwork	Explore how issues of stigma, identity and the transition into 'adulthood' are negotiated among a social network of regular amphetamine type stimulant (ATS) users.	ATS users (primarily meth/amphetamines) Ethnographic contacts (n = 60)	++
Haight, et al.	2008	U.S.A.	Grounded Theory approach Ethnographic fieldwork Semi-structured interviews Psychometric assessment	To examine the psychological functioning of rural children from methamphetamine-involved families.	Interviewees (n = 25) Children in foster care due to methamphetamine misuse (n = 29) Mothers recovering from methamphetamine addiction (n = 4) Foster parents of children from methamphetamine-involved families (n = 7) Knowledgeable rural professionals (n = 28)	+
Lamonica & Boeri	2012	U.S.A.	Semi-structured interviews Ethnographic fieldwork Quantitative survey	Examine the link between methamphetamine use and prescription drug misuse/abuse.	Methamphetamine and prescription drug users (n = 16)	++
Lasco	2018	Philippines	Grounded Theory approach Semi-structured interviews Ethnographic fieldwork	Illuminate behavioural risk trajectories and to better identify critical opportunities for targeted interventions for male sex workers (MSW)	Port vendors/methamphetamine users (n = 20)	+
Lyons, et al.	2006	U.S.A.	Focus group discussions Semi-structured interviews Ethnographic fieldwork Sociodemographic questionnaire	Examine 12-step groups for recovery from methamphetamine and cocaine use that are attended by MSM and the impact of attendance on HIV risk behaviour.	MSW/methamphetamine users (n = 10) MSM/methamphetamine users (n = 62)	++
Nettleton	2010	U.S.A.	Ethnographic fieldwork	Explore experiences of recovery for female methamphetamine users.	Female methamphetamine users in recovery (n = 5)	++
Pennay	2015	Australia	Semi-structured interviews Ethnographic fieldwork Ethnographic fieldwork Thematic Content Analysis	Explore the relationship between pleasure and harm as experienced both during and after extended sessions of party drug use.	Methamphetamine users (n = 25)	++

(continued on next page)

Table 3 (continued)

Author	Year	Country	Methods	Aims	Sample	NICE Quality Score
Reback	1997	U.S.A.	Unstructured interviews Ethnographic fieldwork Focus group discussions	Examine sexual and drug-related behaviours among gay and bisexual males who use methamphetamine.	MSM/IDU Interviews (n = 25) Focus groups (n = 38)	+
Slavin	2004	Australia	Semi-structured interviews Ethnographic fieldwork	Examine social and cultural characteristics of Sydney gay men's crystal use and associated practices and their meanings, and both individual and social levels.	MSM/methamphetamine users (n = 4)	++
Stemmler	2012	U.S.A.	Semi-structured interviews Ethnographic fieldwork Constructivist Grounded Theory	Explore perceptions of pre-pregnancy sexual risk, recognising unintended pregnancy, and engaging in pregnancy, among methamphetamine-using mothers.	Female methamphetamine users (n = 17)	+

history of abuse. This constraint results in a privileging of the personal failure narrative, and a deemphasising of the systemic issues that influenced Christie's life course. [Garriott \(2008\)](#) observes how this creates a situation where Christie's only path back to normalcy and less harmful behaviour is by assuming an identity which will increase her marginalisation.

The adoption of the addict identity and identifying the individual as the primary source of change is often framed as the drug user 'taking responsibility' for their actions and for their addictive behaviours ([Fomiatti, Moore, & Fraser, 2017](#); [Garriott, 2008](#); [Nettleton, 2010](#)). Multiple authors noted, however, that there was a fine line between a message of self-responsibility and one of self-blaming ([Currie, 2003](#); [Fast et al., 2010](#); [Garriott, 2008](#); [Gideonse, 2013](#); [Nettleton, 2010](#); [Reback, 1997](#)). [Reback \(1997\)](#) observed a defeatist attitude among some gay male methamphetamine users in Los Angeles with regards to recovery. The author related this to an internalisation of the addict narrative, which made the prospect of recovery seem unattainable, and lapses into methamphetamine use appear as a manifestation of deep and ongoing personal failures.

Similarly at a residential treatment centre for young drug users, [Currie \(2003\)](#) noted that some participants interpreted self-responsibility as self-blame, taking it to imply the importance of complete self-reliance, and to avoid the assistance of other people or services in their recovery. Participants in suburban Atlanta, United States, ([Boshears et al., 2011](#)) also reported primarily social and relational causes for their decision to initiate and cease using methamphetamine but found these experiences in conflict with the perspective of addiction services that located the source of harmful choices within the individual. A counsellor at a prison-run addiction service expressed a similar perspective, emphasising that '*the only person you blame is the person you see in the mirror*' ([Garriott, 2008](#), p. 107). ([Gideonse 2013](#), p. 195) also observed that participants frequently experienced acute distress due to what they perceived as their culpability for lapses and relapses into methamphetamine use, occurring in a context in which drug users are consistently '*told what emotions they should be feeling*'. This consistent messaging led to a progressive internalisation of both a current addict identity, but also an aspirational future identity as a productive and stable member of society. Addict identities not only labelled individuals in the present, but also temporally placed them on an expected trajectory towards sobriety and socially acceptable behaviour.

The transition into an autonomous and responsible individual taking accountability for the consequences of their drug use was effective for some participants and played a role in their movement towards recovery. In a study of four women using a 12-Step program to recover from methamphetamine, one participant expressed that even though her childhood had '*prepped*' her for the life of risky and harmful behaviours she had undergone, she now felt that '*at some point*' she had to take responsibility for what she had been doing ([Nettleton, 2010](#), p. 175). The author notes that the presence of social support via the 12-Step program was important at these points, as this understanding of personal responsibility can equally act as a motivator for recovery, or a rationalisation to return to drug use. In this way, the identity transition process interacts with the concept of turning points. A turning point can often lead to the need for a broader identity transition, and the failure to make the transition as required by the administrators of recovery can also trigger a turning point back into methamphetamine use.

Social identity

The second key transition occurred around participant's social identity, meaning that identity which they share with others similar to them ([Frings et al., 2016](#)), which became connected with methamphetamine use in the context of socialising, dancing, and spending time with friends. The concept of social identity acknowledges that in addition to personal and individual identity, social networks and settings inform and determine identity and therefore behaviour. People

understand themselves in the context of relations with other individuals, and with specific groups. This is particularly relevant in the field of illicit drug use, where close networks can develop around the distribution and consumption of drugs and also in the context of health services and the process of recovery from addiction (Dingle, Cruwys, & Frings, 2015; Hughes, 2007). The clandestine act of methamphetamine use was observed in this sample to be strongly connected to experiences of intimacy (Boshears et al., 2011; Nettleton, 2010), social confidence (Lyons et al., 2006), and camaraderie (Currie, 2003). Haight et al. (2008) reported concerns from healthcare and welfare workers that children growing up around methamphetamine and being introduced to methamphetamine use by parents were being socialised into beliefs and behaviours that would be a persistent barrier to integration into a wider community, as an identity would become formed around drug use and its consequences. This goes beyond the static model of social exposure to drug use, identifying how methamphetamine becomes intertwined with user's concepts of their selves and their social world. This intertwining makes it more difficult for methamphetamine users to extricate themselves from an environment of drug use (Lyons et al., 2006; Pach & Gorman, 2002). Recovery requires not only the practical resources to move themselves to a new place with new social networks, but also the psychological resources to transition to a new social identity.

Some members of a group of recreational methamphetamine users in Australia actively avoided this identity transition by distancing themselves at times from the world of drug use (Green, 2016). Even though some reported a gradual transition away from wider networks towards primarily drug-user social connections, others also expressed to the researcher how methamphetamine use was 'by no means their entire life' (Green, 2016, p. 206). They acknowledged a persistent social expectation that drug use was limited to a part of their life which they would outgrow. This enabled them to maintain socially valued identities outside of their drug using networks, even as some others found their social connections becoming more attenuated to drug users. Some adolescent drug users at a treatment centre in the United States did not feel ready to begin this transition, reporting instead that they were still enamoured of the risk and excitement of their social drug using scene and their role within it (Currie, 2003). A participant in one ethnography looking at the relationship between MSM, speed, and HIV had successfully abstained from methamphetamine for four years but had been unhappy and lonely throughout that time (Gorman et al., 1997). Alternatively, in a sample of women who became pregnant whilst using methamphetamine, the prospect of motherhood was daunting and initially avoided by some who continued to pursue methamphetamine use (Stemmler, 2012). A court-ordered residential treatment setting, however, gave them a supportive social environment with other former users whom they considered valuable and knowledgeable: 'I have friends now' (Stemmler, 2012, p. 80). This enabled them to accept and adopt the identity of an expectant mother engaged in mutually supportive relationships with those around them. Brief interventions or changes in circumstances can often inspire individuals to change their course. To establish a new trajectory, however, these deeper transitions in personal and social identity also needed to occur.

Discussion

This meta-ethnography has synthesised 19 ethnographic sources addressing cessation and recovery from methamphetamine use. This process identified the presence of recovery triggers in addition to relapse triggers, and the influence of the wider social environment on determining methamphetamine user's susceptibility to these stimuli. These findings also highlight the personal and social identity transitions that occur around methamphetamine cessation, and the challenge of navigating this transition. Several observations can be drawn from the findings of this study.

Participants in the sample underwent turning points in multiple directions: into cessation (Nettleton, 2010), relapsing into

methamphetamine use (Gideonse, 2013), or transitioning into intermittent use (Green, 2016). Participants often attributed these turning points to social and relational factors such as the influence of peers, family, and co-workers (Boshears et al., 2011). Rhodes (2002) has argued for an understanding of drug use as occurring within a 'risk environment', in which a range of social, physical, and historical factors interact to mitigate or exacerbate drug-related harms both at the micro-level of drug administration practices or peer group norms, and the macro-level of law or government policy. This perspective is driven by a focus on harm reduction strategies that address structural as well as individual risk factors (Rhodes, 2009).

Results of the current study demonstrate how risk environments can shape drug-related harms. Micro-level risk environments can manifest as social workplace cultures, or parts of everyday life that become imbued with potential triggers. For MSM participants in the ethnography by Lyons et al. (2006), the association between sex and methamphetamine use heightened the risk in sexual environments. The experience of this trigger may interact with other motivations drug users, including MSM, may have for using methamphetamine, such as managing negative emotions and experiences of stigma (Cabaj, 2000; Halkitis, Mukherjee, & Palamar, 2007). At the macro-level, Lasco (2018) observed their group of young methamphetamine users in the Philippines employing the drug as one of multiple tactics used to manage the economic constraints of their situation. In this context, turning points in these user's trajectories were usually in response to structural changes in their environment, such as incarceration or running out of money to buy the drug, rather than personal choices (Lasco, 2018). Interventions to support methamphetamine recovery need to incorporate an understanding of the complex interactions between individuals and their environments and how they can trigger or inhibit turning points into or out of drug use. This is borne out by growing evidence of the efficacy of Contingency Management, an approach to methamphetamine abstinence that assists individuals to anticipate and manage risk environments and their attendant triggers (Roll, Chudzynski, Cameron, Howell, & McPherson, 2013; Shoptaw, Landovitz, & Reback, 2017).

This wider context of turning points can also be interpreted as an example of the negative aspects of social capital. Understanding of the downsides of social capital was recently expanded in a systematic review by Villalonga-Olives and Kawachi (2017). Social capital has the potential to exert strong informal control over individuals, with excessive bonding capital limiting bridging capital, thereby reducing social mixing and constraining individuals within smaller, more concentrated, homogenous groups (Portes, 1998). Villalonga-Olives and Kawachi (2017) incorporated behavioural contagion into this framework, where both health-promoting and unhealthy behaviours can be equally reinforced by a rich social network. Each of these factors can be observed playing a role in the lives of participants in this review as they encountered turning points in their methamphetamine use trajectories.

Among Australian recreational users, Green (2016) noted the gradual transition to primarily user social groups. Despite the presence of social connections that could be counted as capital, these connections endorsed risky behaviours thereby reducing bridging capital and postponing a potential turning point. Among young drug users in Vancouver, Canada, Fast et al. (2014) observed the strong influence of family and friends on the initiation and reinstatement of polydrug use. For this vulnerable group, the presence of family and friends exacerbated their risk environment, instigating multiple relapse turning points and inhibiting recovery. Social capital was identified by Sampson and Laub (2005) as a key determinant of deviant behaviours across the life course, conceiving it as a form of corrective social control, however the potentially dual nature of social networks is an important detail especially when applied to methamphetamine use (Brown, 2010).

Recognition of the negative aspect of social capital requires researchers and clinicians to contend with the complexity of drug users' social relationships, where connections that promote harmful

behaviour may also be among their most meaningful. Discussion of this issue could also move beyond a binary distinction of positive and negative social capital. The complexity of human relationships allows for drug users to have social connections that provide practical support, self-esteem, or meaning, whilst also promoting harmful behaviour and compromising the individual's other goals. The definition of positive and negative in this context should also be interrogated. Many authors have identified the need to recognise the diverse goals and interests of people in general, as well as illicit drug users, and how the normative assumptions of public health (that all members of the public desire stability, health, and moderation) can prevent the discipline from understanding behaviours that lay outside this framework (Duff & Moore, 2015; Race, 2009; Warner, 2002).

Multiple authors presenting life course approaches argue that turning points which mark the initiation of a new trajectory are likely to require a deconstruction and renewal of the self (Cohler, 1982; Sampson & Laub, 2005). This could be compounded for methamphetamine users entering the turning point of treatment who are likely to also experience psychiatric comorbidities (Shoptaw et al., 2003), necessitating additional transitions towards mental health as well as sobriety. The outcome of this transition process can determine the long-term effect of these turning points (Kearney & O'Sullivan, 2003). Participants in these studies frequently struggled with the identity transitions required by the recovery or relapse process, having complex relationships to the social and biomedical identity of an 'addict', and difficulty negotiating a new social identity in new social circles. Therefore, in addition to the contexts in which turning points occur, these findings also highlight the need to understand the broader identity transitions occurring around them.

Identity and social capital should also be understood as important mediators of illicit drug user's agency. The degree to which drug users experience or exercise agency has been perpetually contested, as it represents the intersection between metaphysical debates, neuroscience, and policy (van der Eijk, 2013). Identity and social capital can be seen to impact on this debate, by the degree to which they influence behaviour, and are determined by social and relational environments. The powerful narrative provided by personal and social identities can be a tool for navigating what is acceptable behaviour, or a desired situation. For methamphetamine users in some of these studies, these identities motivated them to keep participating in drug using social groups (Currie, 2003), or to behave antagonistically toward family members promoting sobriety (Haight et al., 2008). Similarly, social capital can determine the options available to drug users for recovery, by determining their access to guidance, emotional support, role modelling, or practical resources. Social capital can also be generated, however, through intentional agentic action that develops relationships and seeks out connection. Individuals do not therefore have access to a static amount of social capital but rather, are engaged in a dynamic relationship with this resource that both affects and responds to their trajectories of drug use. The degree to which illicit drug users wilfully construct their identities and social capital, and thereby contribute to the behaviours they dictate is a difficult question, and one which seems to imply a continual regress of trying to locate truly agentic action in a complex interaction of personal and impersonal factors.

Perhaps due to this ongoing debate, drug users can encounter multiple competing narratives regarding their recovery, which can complicate their relationship to the 'addict' identity. The agency of drug users is often considered to be limited partly by the physiological effects of the substance, and also by compounding experiences of marginalisation, stigmatisation, abuse, and interpersonal violence (Cox, Klinger, & Fardadi, 2017; Reith, 2004). Alternatively, on entering treatment or recovery, the dominant narrative across rehabilitation services is one of accountability and accepting responsibility for their perceived failures of will or determination. This narrative has been partly generated by the evolution of the neoliberal subject within public health discourse and within the models of treatment services (Fomiatti

et al., 2017; Gideonse, 2013, 2015a). The modern drug user is conceived as someone who is responsible for managing their own adherence to regimes of healthy behaviour, and can be constructed as knowledgeable and rational, and therefore culpable for the consequences of deviant behaviour (Rhodes, 2002). This narrative has the potential to empower drug users, increase perceptions of agency, and promote recovery (Moore & Fraser, 2006; Nettleton, 2010). The transition between these narratives, however, is complex and challenging for some methamphetamine users. It also risks deemphasising the relational and psychodynamic factors influencing methamphetamine cessation, recovery, and relapse.

More conceptual clarity is required regarding the interdependence of agency and structural causes of methamphetamine use, not only to address longstanding debates regarding the nature of dependence, but also to provide a more coherent picture of their condition to drug users seeking help. Being clear about when and where to expect self-aware, agentic action from drug users, and when and where to discuss and tackle macro-level structural factors could support methamphetamine users to navigate turning points towards recovery and the identity transitions associated with it.

Limitations

The findings of this meta-ethnography should be considered within the context of several limitations. At the level of the review, the database search excluded research in non-English languages. There may also be studies using the terminology 'amphetamine' rather than methamphetamine which were also excluded. In addition, a large number of the studies were conducted in the United States. Integrating these findings with those from other settings may be problematic due to the widespread political rejection of harm reduction strategies in the United States, and subsequent emphasis on law enforcement approaches (Des Jarlais, 2017).

Within the studies under review, validity measures such as member checking and stakeholder consultation were not well reported. Qualitative syntheses are also limited by the methodological rigor of the original studies and are not able to independently verify their results. Most of the included studies recruited their participants via treatment services, therefore there is limited data on people who seek to withdraw from methamphetamine in the community, or those using for extended periods in a highly functional way. Most of the sources also only addressed the acute phases of withdrawal and recovery and did not follow participants into long-term recovery.

Conclusions

The 19 sources synthesised for this meta-ethnography support the application of a life course approach to understanding trajectories of recovery from methamphetamine use. These findings develop the life course approach applied to drug use by Hser et al. (2007) by identifying the phenomenon of recovery triggers, and the importance of the contexts in which turning points take place along the trajectory. These findings also support the concept of transitions between social roles and identities that occur around periods of recovery, and the need for these transitions to be supported by a clear narrative regarding the individual's responsibility, agency, and capacity for change. Future ethnographies of methamphetamine recovery should address the impact of adopting the addict identity in long-term recovery and seek to explore the transitions and turning points that may occur after the acute phase of withdrawal and stabilisation.

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Conflict of Interest

The authors declare that they have no conflict of interest.

Turning points, identity, and social capital: A meta-ethnography of methamphetamine recovery

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