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Waring, S, Monaghan, P, Yates, A, Girgiel, N, Giles, S and O'Brien, F (2023) Examining what factors affect inter-agency working in missing child investigations. Policing, 17. pp. 1-14. ISSN 1752-4512

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Examining what factors affect inter-agency working in missing children investigations

Sara Waring*, Paige Monaghan*, Amy Yates*, Nikola Girgiel*, Susan Giles* and Freya O'Brien*

Abstract Despite responsibility for missing children belonging to multiple agencies, police perceive this to be falling heavily on their shoulders, placing substantial demand on finite resources. Drawing on thematic analysis of 24 interviews conducted with police, local authority, social service, and care home staff from across three UK boroughs, the following study seeks to identify what factors facilitate and hinder inter-agency working in the prevention and response to missing children and why. Findings highlight that inter-agency working is facilitated by having 'direct points of contact' across agencies to facilitate information sharing. Inter-agency working is hindered by 'inconsistent definitions of missing', limited 'understanding of roles and responsibilities', 'service demand', 'technological issues', 'fear', and 'discrepancies in responses to missing'. Evidence suggests that partnership working would be facilitated by improving shared understanding of missing, roles and responsibilities, and having direct points of contact across agencies.

Introduction

In the UK, 'missing' refers to 'anyone whose whereabouts cannot be established', who 'will be considered as missing until located, and their well-being or otherwise confirmed' (College of Policing [CoP],

2021). Children make up more than 60% of missing incidents, with over 198,000 reports made in England and Wales in 2019/2020 (National Crime Agency [NCA], 2020). Looked after children are particularly affected, being three times more likely to go missing, to go missing repeatedly,

*Dr. Sara Waring, University of Liverpool, Department of Psychological Sciences, Eleanor Rathbone Building, Bedford Street South, Liverpool, L69 7ZA, UK. E-mail: s.k.waring@liverpool.ac.uk

*Paige Monaghan, University of Liverpool, Department of Psychological Sciences, Eleanor Rathbone Building, Bedford Street South, Liverpool, L69 7ZA, UK

*Amy Yates, University of Liverpool, Department of Psychological Sciences, Eleanor Rathbone Building, Bedford Street South, Liverpool, L69 7ZA, UK

*Nikola Girgiel, University of Liverpool, Department of Psychological Sciences, Eleanor Rathbone Building, Bedford Street South, Liverpool, L69 7ZA, UK

*Dr. Susan Giles, University of Liverpool, Department of Psychological Sciences, Eleanor Rathbone Building, Bedford Street South, Liverpool, L69 7ZA, UK

*Dr. Freya O'Brien, Liverpool John Moores University, School of Justice Studies, John Foster Building, 80-98 Mount Pleasant, Liverpool L3 5UZ, UK

E-mail: hlpmonag@liverpool.ac.uk (PM), hlayate4@liverpool.ac.uk (AY), N.J.Girgiel@liverpool.ac.uk (NG), sgiles@liverpool.ac.uk (SG), F.O'Brien@ljmu.ac.uk (FO)

Advance Access publication: 22 July 2023

Policing, Volume 17, pp. 1–14

doi: <https://doi.org/10.1093/police/paad044>

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and be criminalized after going missing (Babuta and Sidebottom, 2018; Bezeczky and Wilkins, 2022; Taylor *et al.*, 2013). Evidence highlights that ability to prevent and respond to missing child reports requires effective inter-agency working (Perkins *et al.*, 2007; Munro, 2010; HM Government, 2018). However, little research focus has been directed toward identifying the underlying mechanisms that affect inter-agency working in this context. Accordingly, drawing on interviews conducted with police, local authority, social service, and care home staff, the following study seeks to understand what factors facilitate and hinder inter-agency working in missing child investigations. Findings pose important implications for cross-validating inter-team theories and informing practice in the prevention and response to missing children.

Inter-agency response to missing children

Responsibility for preventing and responding to children going missing belongs to multiple agencies, including police, local authorities, social services, care homes, and other partners. These agencies can be thought of as forming a multi-team system (MTS—team of teams; Mathieu *et al.*, 2001) that should be working toward the shared superordinate goal of preventing children from going missing and locating them (Rico *et al.*, 2008). In reality, however, police perceive this responsibility to be falling heavily on their shoulders (Hayden and Shalev-Greene, 2016). Investment of police resources is determined by risk classification (no apparent risk, low, medium, high), with minimal resources allocated to no apparent or low-risk cases as partner agencies are expected to accept responsibility for searching instead (Shalev-Greene and Pakes, 2013). However, agencies are reluctant to apply a low-risk category to missing children, with only 15% of reports classified as no apparent or low risk in England and Wales in 2018/2019, compared to over 75% medium and 7% high risk (NCA, 2020). Evidence suggests that this reluctance stems from a perception that children are inherently vulnerable and that not being where they are expected to be places them at increased risk of harm (Hayden, 2016), along with fear of consequences if a child classified as low risk is

subsequently harmed (Murphy, 2022). In contrast, figures show that 98% of missing children are found unharmed and 34% return home of their own volition (NCA, 2020).

In effect, evidence suggests a mismatch between risk classification, resource allocation, and division of responsibility across agencies (Hayden and Shalev-Greene, 2016; Allsop *et al.*, 2020; Doyle and Barnes, 2020; Giles *et al.*, 2020). Problems with inter-agency working result in police shouldering the burden for responding to missing child episodes (Atkinson *et al.*, 2007; Perkins *et al.*, 2007; Munro, 2010), which can cost between £394 and £509 million annually (Sidebottom *et al.*, 2020). A recent national review of the Missing People Authorized Professional Practice (APP) indicates that part of the problem stems from how ‘missing’ is defined and implemented in practice (Allsop *et al.*, 2020). Evidence suggests a lack of shared inter-agency understanding of concepts such as ‘missing’ (Hayden and Shalev-Greene, 2016; Allsop *et al.*, 2020), and problems with coordination of responses within and between agencies (Pearce, 2013; Fyfe *et al.*, 2014; Giles *et al.*, 2020). Yet, little research focus has been directed toward identifying the underlying causes of these inter-team problems within the context of missing child investigations.

However, similar issues with inter-team working have also been identified in other risky and uncertain environments, including disaster response (Shraagen *et al.*, 2010; Waring *et al.*, 2018, 2020), military operations (DeConstanza *et al.*, 2014), healthcare (Jones *et al.*, 2019), and offender management (Waring *et al.*, 2022). Evidence from across these other contexts highlights that problems with lack of shared understanding of roles and responsibilities compromises ability to coordinate goals and actions, exchange timely and relevant information, allocate resources effectively (Mathieu *et al.*, 2001; DeConstanza *et al.*, 2014; Shuffler *et al.*, 2015), and can delay decisions and actions (Waring *et al.*, 2018, 2020). In effect, not knowing about one another’s roles and responsibilities makes it difficult to know what information to share with whom and when, and how to align and coordinate activities to support one another in achieving a shared goal (Mathieu *et al.*, 2018; O’Brien *et al.*, 2020). Differences in expertise and practice can also lead

to differences in how problems are conceptualized, resulting in agencies implementing actions that work against one another (Schraagen *et al.*, 2010; Waring *et al.*, 2018). Such findings provide useful indicators of processes that affect inter-agency working in MTs operating in risky and uncertain environments. Nevertheless, more robust, and systematic research focus is needed to understand the causes of difficulties in inter-team working within the context of missing children.

Current study

Existing evidence highlights the importance of effective inter-agency working for preventing and responding to missing child episodes, along with minimizing pressure on finite police resources (Pearce, 2013; Hayden and Shalev-Greene, 2016). However, to date, limited research has focussed on identifying what underlying mechanisms affect inter-agency working within the context of missing child investigations. Existing literature on inter-team processes in other risky and uncertain environments provides a useful starting point for beginning to understand the underlying factors that may affect inter-agency working. However, further research is needed to determine the extent to which these existing theories can be applied to missing child investigations. Accordingly, the following study draws on interviews conducted with representatives from police, local authorities, social services, and care homes across three UK boroughs to identify what factors facilitate and hinder inter-agency working in missing child investigations and why. The findings pose important implications for cross-validating inter-team theories to the risky, uncertain context of missing child investigations, and for informing practice to improve inter-agency working.

Methods

Whilst problems with inter-team coordination and information sharing across large and complex MTs operating in risky and uncertain environments is by no means unique, little research focus has been directed to examining the underlying causes of these issues within the context of missing child

investigations. Accordingly, a qualitative research approach has been used to gather in-depth data to provide a deeper understanding of the underlying mechanisms that affect inter-team working in this context (Bhandari, 2020). To enhance methodological fit, we adopted an inductive approach, with meaning being derived from the data rather than making a priori assumptions (Edmondson and McManus, 2007). Data was collected using a semi-structured interview schedule to discuss the lived experiences of police and partner agencies, but with the flexibility to recognize their expertise and allow them to raise additional topics they perceived to be important (Guest *et al.*, 2013).

Participants

Participants were recruited using a theoretical sampling approach, with selection being based on a set of specific characteristics to develop and refine theory (Glaser and Strauss, 2017). Selection criteria included being a member of police, local authorities, social services, or care homes with responsibility for and direct lived experience of responding to missing child episodes. Through consultation with three police officers from a Public Protection Unit (PPU) in one UK police force, potential participants were identified. In line with a theoretical sampling approach, interviews were transcribed and analysed throughout the recruitment process, with recruitment continuing until data saturation was achieved (Fusch and Ness, 2015). Qualitative research literature suggests this can occur between 6 and 12 interviews (Boddy, 2016). However, a total of 24 interviews were conducted to elicit views from a range of roles involved in the response to missing between July and September 2022. Table 1 provides an overview of these participants, including descriptions they provided of their role in relation to missing child investigations.

Materials

An interview schedule was developed, and questions were structured to be open ended to elicit in-depth responses, in line with an inductive approach. We consulted with three police officers from a PPU with responsibility for missing

Table 1: Overview of participants ($N = 24$)

Role	Role in relation to missing	
Police ($N = 13$)	Call handler ($n = 2$)	The first point of contact for emergency (999) and non-emergency (101) calls. Responsible for gathering information to assess risk and grade the required policing response. They can close incidents off or complete a missing person form and pass this over to the dispatch supervisor
	Dispatch supervisor ($n = 2$)	Responsible for receiving reports from call takers and allocating this to available police officers if appropriate. Supervisors can reassess the initial risk grading or close off the incident completely
	Bronze inspector ($n = 2$)	Responsible for managing and overseeing missing people investigations, risk assessing each incident they have ownership of, reviewing the incident every 8 h, and assigning duties and actions to police officers
	Missing person investigation team officer ($n = 1$)	Responsible for working through the actions received from the bronze inspector, distributing enquiries out to other policing shifts, liaising with local neighbour teams, providing a consistent point of contact for the child's family or guardians, and ensuring that basic enquiries have been completed
	Detective inspector ($n = 1$)	Responsible for safeguarding missing children, overseeing the duties of missing person coordinators, attending strategy meetings with partner agencies to share information, ensuring policing roles are fulfilling their safeguarding responsibilities, and holding individuals accountable for any outstanding issues
	Missing person coordinator ($n = 3$)	Responsible for coordinating the multi-agency approach to missing child responses, resolving tactical and strategic problems to reduce risk and harm, deciding if any further action is required for returned missing children, and reviewing long-term missing cases
	Frontline response officer ($n = 2$)	Responsible for attending the address that the missing child was reported missing from, gathering information, conducting searches for the missing child, linking with the family or guardians, and requesting the force control room to provide additional policing units if necessary
Partner agencies ($N = 11$)	Social worker ($n = 4$)	Responsible for aiding police in investigative enquiries to locate the missing person. Responsible for developing safety plan protocols to assess when a looked after child should be reported as missing
	Local authority manager ($n = 2$)	Responsible for overseeing the operational management of child protection within the local authority
	Care home staff ($n = 3$)	Responsible for aiding police in investigative enquiries to locate the missing young person. Responsible for enforcing safety plan protocols put in place by social workers to report a child as missing
	Emergency accommodation staff ($n = 2$)	Responsible for aiding police in investigative enquiries to locate the missing young person. Responsible for enforcing safety plan protocols put in place by social workers to report a child as missing

response across the region to ensure questions were relevant and appropriately worded. The interview schedule included opening questions to explore how participants define 'missing' (e.g. *What does 'missing' mean to you?*). This was followed by questions relating to perceptions of their roles and responsibilities in responding to missing child incidents (e.g. *What is your role in relation to missing person investigations?*), and those of other agencies (e.g. *What other agencies are involved in the response to missing children? What are their roles?*). Finally, participants were asked to discuss how well they perceived agencies to work together in the prevention and response to missing children (e.g. *How effectively do you think agencies work together in the response to missing children?*), and

what factors they felt affected partnership working (e.g. *What factors facilitate/ hinder the ability of agencies to work together in the response to missing children?*).

Procedure

Interviews lasted between 27 and 92 min ($M = 54.54$, $SD = 18.01$) and were recorded, transcribed verbatim, anonymised, and then audio files were deleted. Throughout interviews, steps were taken to improve the trustworthiness of the data, including paraphrasing to check that researcher interpretation aligned with participant meaning, and asking interviewees for concrete examples to sense check (Varpio *et al.*, 2016).

Data analysis

Interview transcripts were analysed using NVivo software version 12. A data-driven, inductive thematic analysis approach was adopted to explore perceptions and experiences of police and partner agencies regarding the inter-agency response to missing children. Thematic analysis is a form of content analysis used to systematically and reliably analyse qualitative data to derive meaning from common themes (Braun and Clarke, 2019). Unlike other forms of content analysis, thematic analysis focuses on content rather than counting frequencies of words. Thematic analysis was selected for this study because it allows themes to emerge from the data with a level of depth that quantitative research struggles to achieve, but enough flexibility to answer the research question (Castleberry and Nolen, 2018).

Data were analysed in line with Braun and Clarke's (2006) six-stage process, which starts with transcribing interviews to become familiar with content. Transcripts were coded phrase-by-phrase to derive meaning from participant responses. *In vivo* coding was more appropriate for ensuring that codes were developed using participants' own voices to reflect their perceptions (Manning, 2017). Initial codes were compiled into similar groups to develop themes. With each interview, codes were revised to ensure commonalities were identified and themes were relevant to addressing the research question, which is importance to the rigor and validity of qualitative research (Castleberry and Nolen, 2018).

A subsection of 10% of interviews were analysed by two trained researchers in order to measure inter-rater reliability (IRR). The use of IRR has been criticized by some researchers who argue that the role of qualitative research is not to reveal universal truths but to apply expertise to interpret perspectives on an issue (Clarke and Braun, 2018). However, given that this project has real-world implications for practice, IRR was conducted to demonstrate trustworthiness, transparency, and consistency (O'Conner and Joffe, 2020). Results of Cohen's Kappa ($\kappa = .849$, $P < 0.001$) indicated an almost perfect level of agreement (McHugh, 2012).

Results

Thematic analysis of 24 interviews highlighted seven common themes relating to factors that facilitate and hinder inter-agency working in missing child investigations: (i) direct points of contact; (ii) technology; (iii) inconsistent definitions of missing; (iv) understanding of roles and responsibilities; (v) service demand; (vi) fear; and (vi) discrepancies in responses to missing. The number of quotes relating to each theme is presented in Table 2 to highlight prevalence across interviews.

Direct points of contact

All participants interviewed highlighted that inter-agency working was facilitated by having a point of contact within each service that they could communicate with directly, whether that be via telephone,

Table 2: Frequency of themes across interviews

Theme	Number of participants who mentioned theme		Frequency of quotes relating to theme (%)
	Police	Partners	
Direct points of contact	13	11	186 (10.4%)
Technology	10	0	26 (3.8%)
Inconsistent definitions of missing	13	9	74 (4.7%)
Understanding of roles and responsibilities	13	11	191 (11.4%)
Service demand	12	11	95 (4.1%)
Fear	9	5	32 (1.4%)
Discrepancies in responses to missing	13	11	175 (10.0%)

face-to-face meetings, or e-mail. Most notably, participants noted the importance of this for improving inter-agency information sharing. The most common way partner agencies are expected to provide information to police in relation to a missing child is to call the non-emergency service number (101), which is problematic and inefficient. Since 101 receives a large volume of calls, partner agencies spend substantial time on hold waiting to speak to someone who then needs to transfer them to the relevant person to repeat the same information. This could sometimes lead partners to question whether it was worth passing on information. When practitioners had a direct point of contact, they did not need to repeat the same information so the relevance and timeliness of information sharing was improved. Having direct points of contact also helped facilitate relationships and understandings of one another's roles and responsibilities. However, frontline responders from across police, care homes, and social services, highlighted that it was difficult to facilitate relationships and develop direct links with other agencies because they were too busy responding to caseloads.

I think the key thing for me is having that specific person, because otherwise you just speak to somebody different, and they don't know the concerns, so you are kind of repeating yourself again and again. For me it's the key person. Without them I don't think the system would work.

We had to bring in staff solely to call 101 on a 24-h basis, because sometimes it would take 20 min to get through. By the time we get through to the call handler, something else has happened and you're putting the phone down and then you've got another 40-min wait.

It just seems difficult to communicate with social services. With other agencies I know they have a face and a name, and we speak to the same person [...] with social services, I wouldn't know any of their names, I wouldn't know any contact details so I think one of the good places to start is to try and

facilitate better links between us.

Technology

Across policing roles, feedback highlighted that inter-team information sharing was affected by technology. The police force participating in this research utilizes two operating systems to document missing person investigations: ControlWorks and Niche. ControlWorks is a control system used primarily by senior command and call handlers to support 999/101 calls. Niche is a record management system. Despite the intention being for risk assessments and warning markers documented during a call to be manually transferred from ControlWorks to Niche during closure of the incident, this does not always happen. ControlWorks was reported to hold vast amounts of disorganized, duplicated information that is difficult to filter, which increases the potential for documented risk factors to be missed. Consequently, police are required to cross-reference both systems to interpret information, which is time-consuming. There are a number of different policing roles involved in the response to missing children, and each party potentially has access to different information that someone else may need, sometimes quickly in dynamic situations. Feedback highlighted the need for systems to be integrated to improve ability to quickly share and access information. Police officers suggested the implementation of trigger plans to provide a concise summary of the most relevant information to increase clarity on the systems.

There's a lot of information that is held on ControlWorks that doesn't get uploaded to Niche. Important information like 'We spoke with an ex-girlfriend who tells us that his new girlfriend is such a person, and this is their phone number'. By the time the episode closes down all that extra information that might be risk indicators, it is hit or miss whether that gets included in the closure.

Updates are saying 'attended at the address, no reply' but for me reviewing, who is it? What address have you

attended? Does it mean they've spoken to the occupiers? [...] the amount of duplication and revisiting that we have creates a lot of its own demand [...] I send a new officer, because I'm not satisfied that address has been checked properly, it's a duplication of effort. [...] trigger plan would be to condense down again the actual pertinent information so it's not prescriptive, but it would be a 100- to 200-word document introducing the officer to that kid, why that kid is in care, the difficulties that kid has had in their life.

Inconsistent definitions of 'missing'

When asked to define what the term 'missing' meant, all parties provided a similar definition that corresponded with the UK CoP (2021) definition, that missing refers to '*anyone whose whereabouts cannot be established*'. Nevertheless, feedback from police officers interviewed highlighted that, in practice, 'whereabouts unknown' was insufficient for classifying a person as missing. Police believed that 'out of character' was an important factor, despite this no longer being part of the national policing definition. In contrast, partner agencies placed emphasis on 'whereabouts unknown' in justifying the need to report a young person as missing if they were not where they were expected to be. These differences in conceptualizing missing across agencies created obstacles for inter-agency working, generating inconsistencies in expectations that could create tensions between agencies (for example, care homes reporting a young person as missing that police did not recognize as meeting the criteria).

You know, (the definition is) if their whereabouts are unknown and you don't know where they are [...] I don't know where my partner is at the minute, is he missing? No, he's not...It used to be different, it used to be 'out of character' for a missing person. I believe that is crucial. You know, is it out of character?

We're telling them why they are missing so I think that sometimes police do not always take our professional word on things and the reasons why we are worried and that annoys me.

If they do go missing, you are to report them missing straight away and I can get quite a hostile response from the police, and I just think that sort of creates a barrier.

Understanding of roles and responsibilities

All participants highlighted the importance of understanding one another's roles and responsibilities for effective partnership working and believed that further work was needed to achieve this, both within and between agencies. Within the police service, front line response officers and call handlers reported being unfamiliar with other policing roles, which could sometimes affect their ability to know what information to elicit. Staff from unregulated accommodations also felt that police did not understand limitations in their power to set curfews and decide whether to report young people as missing. In addition, across partner agencies, feedback highlighted difficulties understanding policing decisions due to lack of awareness of police powers and policies. This lack of understanding meant that expectations often differed and could create frustrations.

I couldn't tell you who worked on them, and I couldn't really tell you what their remit was, what their role was in relation to, you know, [...] missing children, what is their role?

I think other agencies really struggle to understand some of the decisions social services make. So, no, I don't think other agencies feel that we fulfil our role, purely because there's a lack of understanding about what our role is. Sometimes the police actually believe we've got a lot more power than we have [...]. It would be nice if different agencies would come to us and see what we were about, meet our project, meet our staff and see what we are about.

Service demand

All participants interviewed highlighted that a key barrier to inter-team working, both within and between agencies, was the level of demand being placed on finite resources. Pressure on resources meant that agencies felt they needed to prioritize meeting internal goals over inter-agency working. Whilst police recognized what they should be doing to fulfil their responsibilities, they felt they were expected to meet '*impossible demands*' with limited staff. All parties worried that missing children were not always prioritized in the way they should be as a result of demand. Partner agencies recognized the pressure that police were under and that this affected their ability to share information and meet the expectations of external partners. Police also recognized the importance of social workers and care home staff in supporting missing child investigations, but that lack of resources meant these partner agencies were often unable to invest the time and effort needed.

I can't sit in good faith and tell you that we pay missing person investigations all of the focus that we should do on occasion, because we have to prioritise according to the perceived threat, risk and harm.

I don't want to speak out of turn about other agencies, but if you're talking about social services, you know their role is vital, and they can offer us a lot of information. Unfortunately, it's not working because their system is at saturation.

Police should do a welfare check on that property at that address to see if he is there but obviously because of our facilities, I think I've only ever managed to have that done 3 times in 7 years and it does boil back down to staff shortages in services.

Fear

All practitioners noted having a '*worst-case scenario*' mindset in relation to missing children. This was encapsulated by the fear of '*what if* a missing

child is categorized as 'no apparent risk' or 'low risk' and subsequently becomes injured or killed. This fear produced a mantra of '*possibilistic*' over '*probabilistic*', with decisions being driven by unlikely worst-case outcomes. For example, care home staff believed that repeatedly reporting a child as missing, even when concern was low, would prevent personal liability if something untoward happened to the child. Police interviewees felt that partner agencies risk adverse approach to reporting all children as missing when they were not where they were expected to be fractured relationships between agencies as they perceived this as passing responsibility to police and increasing demand on police resources.

People don't want to accept risk anymore and people are afraid of the 'what ifs'. They [social services/care homes] can always use the 'what if something happens to them' and that is how police accumulate this demand.

What's always in the back of your mind when dealing with missing persons isn't just the duty of care that we as the police have towards those individuals. It's also the accountability on the individuals and the organisation if we fail to perform our duties.

I'll be like 'No you need to log this. I need evidence you've logged it. What is your desk number because I need all the details? If something happens to this person, I need to show what I have done.' After that, sometimes you see them [call handlers] change a bit.

Discrepancies in responses to missing

Feedback from all participants highlighted there were inconsistencies in responding to repeat missing children within and between agencies. Risk level appeared to vary across police interviewees with specialized safeguarding roles having more complex understanding of risks associated with repeat missing incidents. This knowledge led to disparities with repeat missing children being viewed as low risk for non-specialized roles and high risk for

specialized roles. Consequently, specialized police roles often needed to reassess incidents and argue for the risk level to be increased due to safeguarding concerns causing intra-agency tension. This perception also compounded inter-agency hostility during implementation of curfew procedures for repeat missing children. Partner agencies noted that safety plan protocols required them to report children as missing if they missed curfew. However, police participants perceived this type of reporting meant that many cases reported to them did not warrant police intervention, perceiving them to be of low/no apparent risk. Care home and accommodation staff often felt stuck in the middle, with social workers pushing them to report a child that missed curfew and police pushing not to report.

Other people doing risk assessments, they'll play down a risk to a child, for instance, by referencing the child as streetwise [...] I don't see that as a mitigation, I see that as an aggravation.

We do have a lot of missing people who are not really missing [...] because they are in a hostel accommodation and they haven't returned by 11:00 PM in line with their own local curfew, they pick up the phone and sometimes they'll report 3 individuals from the same hostel as missing, one after another, purely because their own local policy says they have to.

Social workers use and incorporate police in their safety plans, and it shouldn't be happening because all that happens to us [care homes] is that we have sort of a relationship breakdown with the police because they think we do not know what we are doing, and we do. We're just doing it according to the safety plan that social services put in place [...]

Discussion

To date, little research has focussed on identifying the underlying mechanisms that affect inter-agency working within the context of responding to missing

children. Accordingly, drawing on interviews conducted with 24 representatives from across police, local authorities, social services, and care homes the current study aimed to identify facilitators and barriers to inter-agency working within the missing children context. Overall, findings highlight seven key factors that affect inter-agency working: (i) direct points of contact; (ii) technology; (iii) inconsistent definitions of missing; (iv) understanding of roles and responsibilities; (v) service demand; (vi) fear; and (vii) discrepancies in responses. Findings also suggest that police and partner agencies define 'partnership effectiveness' in terms of ability to easily share relevant, reliable, timely information and to coordinate actions to achieve the common goal of safeguarding children.

Facilitators and barriers to inter-agency working in responding to missing children

In line with previous research relating to inter-agency working in MTSs operating in risky and uncertain environments (Kapucu, 2008; Heavey and Simsek, 2015; Mathieu *et al.*, 2018; Waring *et al.*, 2018, 2019, 2020, 2022), current findings highlight the importance of sharing relevant, reliable, and timely information to the effectiveness of inter-agency working and improving situational awareness and risk assessment. As with other complex MTSs operating in risky and uncertain environments, findings also highlighted the importance of developing relationships and familiarity with one another's roles and responsibilities for improving information sharing. In effect, this improves understanding of what information to share, with whom, and when (Wegner *et al.*, 2005; Jarvenpaa and Keating, 2011; Waring *et al.*, 2018, 2019, 2020; Brown *et al.*, 2021).

Within the current study, both police and partner agencies believed that one way of doing this was to have single points of contact within agencies to facilitate the development of trust, familiarity with one another's roles and responsibilities, and improve the relevance and timeliness of information. This is in contrast to the current system predominantly in place, which requires partner agencies to call a generic non-emergency police

number (101). Feedback highlighted that partners are often on hold for prolonged periods, and are then transferred to different parties to repeat the same information again until it reaches the relevant audience. This delays information sharing and can also make partner agencies question whether the information they have is worth sharing. However, unlike previous policing research, which highlights that single points of contact are often scarce at strategic levels (Atkinson *et al.*, 2005), current findings suggest these points of contact are scarce at operational levels. As previous research in relation to MTSs responsible for offender management has shown (Waring *et al.*, 2022), the increasing demand being placed on frontline workers' caseloads is leading them to invest in meeting intra-agency goals at a cost to inter-agency working and relationship building. Feedback suggests it may be beneficial for agencies to dedicate points of contacts at operational levels to facilitate inter-agency working within the context of responding to missing children to improve familiarity and knowledge of roles, leading to better information sharing.

However, despite agencies prioritizing intra- over inter-agency goals, findings also highlighted information sharing difficulties within agencies. In particular, police noted difficulties with information sharing across roles due to the IT systems in place. Although the intention is that a subset of key risk critical information contained on ControlWorks will automatically be transferred onto Niche, comments indicate that filters are inadequate, which means that workers have to manually transfer this information from one system to another. In addition to placing further demand on limited police resources, this can lead to inconsistent and duplicated information that impedes the ability of different policing roles to access the information they need to understand 'what is going on' (O'Brien *et al.*, 2020). While technological barriers to information sharing in MTS settings have primarily been documented across agencies (Lacerenza *et al.*, 2014; Waring *et al.*, 2019, 2020; Festila and Muller, 2022), current findings highlight that similar technological issues can also occur within agencies, with similar consequences in terms of hindering easy access to relevant, reliable, timely information. This can be particularly problematic in dynamic contexts where

quick access to information is needed to maintain an accurate understanding of the changing situation and risks (Mishra *et al.*, 2011). Feedback suggested that integration of systems and trigger plans that summarize key information about the missing person would be beneficial for improving situational awareness in missing child investigations (CoP, 2021).

Also, in line with previous MTS research, current findings highlight that knowledge of one another's roles and responsibilities is important for improving expectations and coordination of actions to achieve a common goal (Bharsoa *et al.*, 2009; Stanton, 2015; Waring *et al.*, 2019; Turner *et al.*, 2020). Feedback from across participants highlighted limited knowledge of roles and responsibilities, which led to unachievable expectations across partners, poor understanding of one another's decision processes, and frustrations. Most notably, this centred on the issue of care homes reporting all children as missing if they breached curfew. Whereas care home staff felt obliged to report due to strict policies implemented by social workers (Simon *et al.*, 2016), police perceived this reporting to be inappropriate. This was also being driven by the fear of what may happen if they did not report a child as missing who was subsequently injured or died. The advice given during initial stages of missing is 'if in doubt, think murder' (National Centre for Policing Excellence, 2005: p. 9) but missing children outcomes are inherently certain with 98% returning home unharmed (NCA, 2020). Feedback suggests that the combination of limited understanding of roles and responsibilities, strict policy adherence, and fear of being publicly shamed and held accountable like agencies were in response to the death of 'Baby P' is leading to over-reporting (Hayden and Shalev-Greene, 2016; Murphy, 2022). These findings indicate the need for a clear and concise map of roles and responsibilities across all agencies involved in the prevention and response to missing children to reduce misunderstandings, clarify expectations, improve information sharing and coordination of actions.

Finally, feedback also highlighted that effective inter-agency working was being hindered by a lack of shared understanding of the term 'missing'. Police and partner agencies attached different meanings to

'missing', leading to misunderstandings (semantic ambiguity; Boland and Tenkasi, 1995). While partner agencies adhered to the current policy implementation of the CoP definition of '*whereabouts unknown*', in line with previous missing person research police felt this was sometimes insufficient (Shalev-Greene *et al.*, 2019). In particular, police considered whether the behaviour was '*out of character*' to be an important factor in classifying someone as missing despite '*out of character*' being removed from the definition in 2016 (Shalev-Greene *et al.*, 2019). In addition to emphasizing police dissatisfaction with the current UK definition of 'missing', this study also highlights disparities in how the definition is interpreted and acted on across agencies in practice, with demand impacting the way policy is perceived and implemented. Police perceive the current broad definition allows partners to report anyone as missing for not being where they were expected to be, even where concern for their safety is minimal, which is problematic to respond to given their finite resources. Findings suggest further clarification is needed regarding the definition of missing and roles and responsibilities across agencies. In line with previous MTS (Waring *et al.*, 2018, 2020) and child protection research (Thompson *et al.*, 2016), findings suggest it would be beneficial to provide opportunities for police and partners to shadow one another to develop familiarity, shared understanding of 'missing' (Shalev-Greene *et al.*, 2019), and how roles can work together more efficiently in preventing and responding to missing children (Curnin *et al.*, 2015).

Limitations and future research

This research was conducted in collaboration with a single police service across three boroughs, which may raise questions regarding the generalisability of findings to missing child investigations across other regions of the UK. However, themes that emerged from these interviews echo similar barriers identified within the literature relating to MTSs operating in a variety of risky and uncertain environments, including information sharing difficulties, limited understanding of roles and responsibilities, and inconsistencies in use and interpretation of language. This suggests that a common set of human

processes and behaviours are implicated in inter-agency working in risky and uncertain environments. However, in contrast to MTS research conducted in relation to other extreme environments, current findings also highlight additional concrete mechanisms that can affect both intra- and inter-agency working within the context of responding to missing children, including use of single points of contact at operational levels and issues with integration of technology within the police service. Further research across other police forces within the UK would be beneficial for determining whether similar factors facilitate and hinder intra- and inter-agency working within the context of responding to missing children. In addition, further focus on comparing how the CoP conceptualizes 'missing' in policy and how various police forces seek to implement this in practice within the complex environments they operate would be beneficial for understanding how policy and practice could be better aligned.

Conclusion and implications

This study sought to identify what factors facilitate and hinder partnership working within the context of responding to missing children. Overall, findings from within this study echo previous research conducted in relation to other complex MTSs operating in risky and uncertain environments, including disaster response, military operations, health emergencies, and offender management. This indicates that there is a core set of human processes and behaviours that are vital to effective intra- and inter-agency working in these complex MTSs, including information sharing and coordination. Findings also indicate that similar underlying mechanisms may be causing difficulties in information sharing and coordination across these challenging contexts, including lack of familiarity with roles and responsibilities, inconsistencies in use and interpretation of language, accountability pressure, and demand placed on resources. These findings are important for cross validating theories relating to inter-team processes in risky and uncertain environments. They are also unique in that they provide evidence regarding

the underlying causes of difficulties in partnership working that are often observed within the context of responding to missing children. Such knowledge is important for implementing practices that will address the underlying causes of difficulties to improve partnership working within the context that these agencies operate in. Feedback from police and partner agencies suggest that increasing direct points of contact across agencies, trigger plans, and providing opportunities for shadowing across roles would improve information sharing and coordination.

Author Contributions

SW conceived and implemented the study. PM, AY and NG carried out interviews, transcribed and provided results of analysis. SW and PM wrote the manuscript. SW, SG and FO provided expertise on the topic under investigation. All authors edited the final manuscript.

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