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ABSTRACT

Missing persons incidents incur considerable societal costs but research has overwhelmingly concentrated on missing children. Understanding the phenomenon among adults is underdeveloped as a result. We conducted an evolutionary concept analysis of the 'missing person' in relation to adults. Evolutionary concept analysis provides a structured narrative review methodology which aims to clarify how poorly defined phenomena have been discussed in the professional/academic literature in order to promote conceptual clarity and provide building blocks for future theoretical development. A systematic literature search identified $k = 73$ relevant papers from which surrogate terms for, and antecedents, consequences, and attributes of the occurrence of adult missing persons were extracted and analysed. The core attributes of the adult missing person are (i) actual or perceived unexpected or unwanted absence accompanied by an absence of information and (ii) a potential adverse risk outcome as perceived by those left behind. The centrality of mental ill-health in actual adult missing persons cases is not reflected in theoretical development which largely comprises descriptive typologies of variable quality and questionable utility. There is a clear need to shift research emphasis towards clinical and psychological domains of inquiry in order to further advance the field of adult missing persons research.

UK police receive over 300,000 missing person reports annually (UK Missing Persons Bureau (UKMPB), 2017) at an estimated cost of £750,000,000 (Shalev Greene, & Pakes, 2014). Despite the obvious need to prevent and resolve these incidents, the topic has been poorly defined and, from a theoretical perspective, underdeveloped (Parr & Fyfe, 2013). Various definitions of who is considered to be a 'missing person' (see Table 1) have been used across a range of professional contexts including law enforcement, health, and social care; and academic disciplines including psychology, geography, criminology, and mental health practice (Bayliss & Quinton, 2013; Biehal, Mitchell, & Wade, 2003; Gerace et al., 2015; Henderson, Henderson, & Kiernan, 1999; James, Anderson, & Putt, 2008; Payne, 1995; Swanton & Wilson, 1989).

In the context of very low baseline activity, scholarly interest in adult missing persons has grown in recent years but considerable gaps and contradictions in our understanding of the concept remain. Much published work uses the term 'missing person' to refer both

Table 1. Definitions of missing person used in previous literature.

Study	Definition used and conceptual elements (Rodgers, 2000) included	Surrogates	Antecedents	Attributes	Consequences
Association for Chief Police Officers (2005/2013)	'Anyone whose whereabouts cannot be established and where the circumstances are out of character or the context suggests the person may be subject of crime or at risk of harm to themselves or another'	✗	✗	✓	✓
Bayliss and Quinton (2013)	'Incidents involving a person whose whereabouts could not be established, behaviour was out of character, or who was thought to be at risk of harm were classified as a 'missing persons'. Incidents involving people who were not where they were expected or supposed to be but not thought to be in any risk were classified as "absences"'.	✓	✗	✓	✓
Biehal et al. (2003)	'If an individual's absence from their normal social network is seen as unexpected, distressing or unacceptable, others may define them as missing'.	✓	✗	✓	✓
Biehal et al. (2003)	'A break in contact which either the missing person or someone else defines as going missing, and which may be either intentional or unintentional'.	✗	✗	✓	✗
College of Policing (2016)	'Anyone whose whereabouts cannot be established will be considered as missing until located, and their well-being or otherwise confirmed.'	✗	✗	✓	✗
Henderson et al. (1999)	'Anyone who is reported missing to police, whose whereabouts are unknown, and where there are fears for the safety or concerns for the welfare of that person'.	✓	✗	✓	✗
James et al. (2008)	'Someone whose whereabouts is unknown and there are serious concerns for their safety and welfare. This excludes escapees from custody'.	✓	✗	✓	✗
Payne (1995)	'A social situation in which a person is absent from their accustomed network of social and personal relationships to the extent that people within that network define the absence as interfering with the performance by that person of expected social responsibilities, leading to a situation in which members of the network feel obliged to search for the missing person and may institute official procedures to identify the person as missing'.	✓	✗	✓	✓
Royal Canadian Mounted Police (2015)	'Anyone reported to or by police as someone whose whereabouts are unknown, whatever the circumstances of the disappearance. The person will be considered missing until located'	✗	✗	✓	✗
Swanton and Wilson (1989)	'A missing person is one who, not being the subject of a lawful commitment order, is absent from his/her normal haunts in breach of the reasonable expectations and/or responsibilities of another by reason of abduction, altered state of consciousness or voluntary decision, and whose location is either not known or, if known, who is illegally detained.'	✓	✓	✓	✗

to adults and minors yet research has largely focused on the latter, particularly on run-aways from substitute care environments (Malloch & Burgess, 2011; Patterson, 2007; Shalev, 2011; Taylor et al., 2014). To simply assume that similar factors explain both child and adult missing person incidents is, in our view, unsubstantiated. Some drivers of missing person status may be shared: for example, coercion or force in the case of abduction; homicide, suicide, or accident in the case of death (Biehal et al., 2003). However, kidnappings and abductions account for disproportionately more missing children reports by a ratio of 12:1 (Biehal et al., 2003). In contrast, almost two-thirds of adult missing persons are reported missing in the context of marital breakdown, financial difficulties, and other life events that children do not face in the same manner (Biehal et al., 2003; Stevenson, Parr, Woolnough, & Fyfe, 2013). As a result, it seems counterproductive to use the generic term 'missing person' to describe all individuals who have been reported, or have been considered as, missing. It does not offer any further information regarding the context of the situation, the characteristics of, or the circumstances faced by, the person involved.

In terms of adult missing persons who have symptoms of dementia, a distinction has been made in the literature between wandering and missing (Holmes, Shalev Greene, Clark, & Pakes, 2015; Rowe et al., 2011). Based on an analysis of newspaper reports, Rowe et al. (2011) proposed that wandering occurs regularly within predictable time frames whilst the person is temporally and spatially disorientated. Missing incidents, however, are isolated, unpredictable, and normally occur whilst the person is engaged in routine activities. Despite such differences, the terms 'missing person', 'wandering' and many others are still used interchangeably and it is no surprise that many caregivers struggle to categorise the individuals' behaviour and the risks that are associated with it (Houston, Brown, Rowe, & Barnett, 2011).

This definitional confusion is not exclusive to dementia-related missing incidents and, consequently, there is a lack of clarity amongst practitioners, educationalists, and researchers when referring to and discussing 'missing persons'. Whilst the term 'missing person' transgresses professional and academic boundaries, it is currently poorly defined and understood as a result, particularly in relation to adult missing persons. It is therefore imperative, in our view, that the underlying dimensions that contribute to the concept 'adult missing person' are elucidated to allow us to advance knowledge and further debate.

Aims and objectives

This paper examines the evolving use of the term 'missing person' in relation to adults in professional and academic discourse. The aim is to better understand the phenomenon as a starting point for future theoretical development and empirical research.

Method

Concept analysis is a type of structured narrative literature review that facilitates familiarity with the constituent components of a specific term (Tofthagen & Fagerstrøm, 2010). It is mostly used when a concept lacks clarity (Cronin, Ryan, & Coughlan, 2010) and is theoretically underdeveloped (Botes, 2002). A range of methodologies are available (Chinn & Kramer, 2011; Rodgers, 2000; Walker & Avant, 2005) and although similarities exist

between the various models, Rodgers' (2000) evolutionary concept analysis provides much greater scope to understand the changing nature of the chosen concept and its key components (Endacott, 1997; Tofthagen & Fagerstrøm, 2010). It is for this reason that the current study has employed Rodgers' (2000) evolutionary approach. Tofthagen and Fagerstrøm (2010) indicate that the evolutionary concept analysis incorporates three phases of analysis: initial, core, and further.

The initial phase is primarily concerned with identifying a meaningful and significant concept and, more importantly, understanding the associated contextual elements (Tofthagen & Fagerstrøm, 2010). Rodgers (2000) argues that, since a concept is generally employed cross-contextually, variations will exist in how it is used and understood. As a result, these contexts should be individually drawn out from the literature and incorporated into the analysis in order to aid understanding and clarity of the chosen concept. Contextual elements comprise the professional (discipline areas associated with use of the term), temporal (changing use of the term over time) and theoretical (the theories which have been used to describe, explain, predict or control the concept) contexts in which the concept occurs. Understanding the theoretical context of a concept is central and key to concept analysis (Dreifuerst, 2009).

The core analysis phase of the evolutionary concept analysis model, according to Tofthagen and Fagerstrøm (2010), is primarily concerned with the extraction of four key conceptual domains from the literature: (i) 'surrogates' are terms used interchangeably or synonymously with the concept; (ii) 'antecedents' are actions and events that precede the concept; (iii) 'consequences' are those that follow; (iv) 'attributes' are the component characteristics of the concept.

The third phase is further analyses. It is important to note that concept analyses do not aim to provide a definitive answer as to what the chosen concept is. Instead, they look to provide a deeper understanding of the core components which have contributed to the development of a concept over time and, more importantly, to aid clarity as a starting point for future research and theoretical development. As a result, the final phase of the evolutionary concept analysis is to ensure that ideas are presented in a way which aids these outcomes.

Whilst this review is narrative in nature, elements of systematic review methodology were utilised (e.g. PRISMA (Moher et al., 2015) to ensure analyses were based on comprehensive identification and accurate appraisal of relevant literature.

Data sources

Multiple electronic databases were searched (*PsycINFO, PsycARTICLES, Web of Science, Science Direct, MEDLINE, CINAHL* and the *Psychology and Behavioural Sciences Collection*) from inception to 30 April 2016. Additional manual searching of reference lists and grey literature was conducted. Search terms were 'missing' in combination with 'person', 'people' or variants; or 'runaway'; or 'abscond' (combined with 'mental health'); and 'adult'. Papers were screened and assessed for relevance.

Inclusion and exclusion criteria

As the aim of this analysis was to examine how the term 'missing person' is addressed in relation to adults in professional discourse we included opinion pieces, narratives, and

contextual reports as well as empirical studies. Decisions to exclude studies were based on the following criteria:

I. Non-English language papers
II. Papers not concerned with missing persons
III. Papers, which referred only to 'wandering' in the case of dementia
IV. Papers concerned solely with minors.

Figure 1 shows the number of papers identified for inclusion and the numbers/reasons for exclusion of others.

Data extraction and analysis

Included papers were read (CT) and information regarding the five conceptual domains (as outlined above) was extracted and tabulated. All authors agreed final surrogate terms, antecedents, consequences, attributes and contextual elements. The theoretical context was explored in two ways. First, we reviewed proposed theories to ascertain whether they met Gerrig and Zimbardo's (2002) definition of a theory as an organised set of concepts that explains a phenomenon or set of phenomena with reference to relationships between those variables, and subsequently evaluated inclusions against criteria used in forensic psychology theory evaluation set out by Gannon, Ward, and Collie (2007): (i) *empirical adequacy* (has the theory received empirical support?); (ii) *internal coherence* (are important elements of the theory integrated in a sensible manner?); (iii) *explanatory depth* (does the theory identify latent components that can explain the associated behaviour?); (iv) *fertility* (is the theory able to develop new research, treatments and understandings of the associated area?); (v) *unifying power* (does the theory create new knowledge by bringing previously independent theories together?).
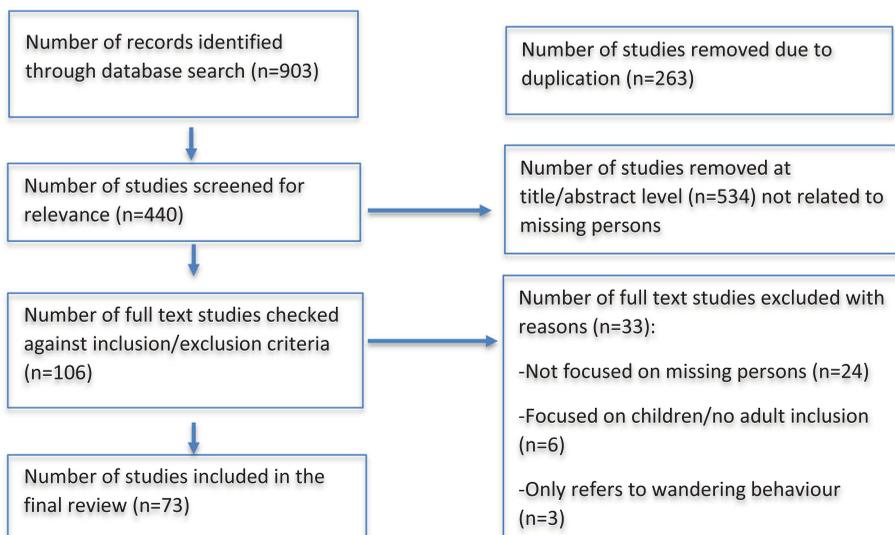

Figure 1. Flowchart of papers identified for inclusion or exclusion.

Second, papers which proposed typologies or taxonomies rather than explanatory theories were evaluated against criteria previously used to evaluate firesetter typologies (Dickens, Sugarman, & Gannon, 2012; based on Helfgott [2008] Gibbons [1975]): (i) *homogeneity* (the population under consideration displays a comparable set of behaviours); (ii) *clarity and objectivity* (there will be clear specifications for reliable category membership assignment across time and between raters); (iii) *mutual exclusivity* (individuals will fit only into one category); (iv) *comprehensivity* (no leftover individuals following classification and no 'miscellaneous' category); (v) *parsimony* (relatively few categories); and (vi) *empirical congruence* (categories should fit with the known empirical data).

Results

Contextual elements

Professional context

Professionals working with/for adult missing persons include social workers (Payne, 1995), police (Fyfe, Parr, Stevenson, & Woolnough, 2015; Newiss, 1999) and mental health professionals, most commonly mental health nurses (Bowers, Jarrett, & Clark, 1998; Muir-Cochrane & Mosel, 2009; Bowers & Stewart, 2010). Academic disciplines involved in related research included human geography, psychology, nursing, medicine, criminology, forensic science, and sociology.

Temporal context

The number of papers indexed using the search terms 'missing person' or 'missing persons' on the academic database Scopus increased from two (1960–1969) to: 15 (1970–1979), 32 (1980–1989), 60, 1990–1999), 182 (2000–2009), and, finally, 331 (2010–2016). Before 1980, use of the term 'missing person' to refer to an adult of unknown whereabouts occurred in three ways. First, in papers discussing forensic dentistry, anthropological and medical techniques as aids to cadaver identification (Bang, 1972; Berry & Hunt, 1967; Brown, 1984; Brown, Delaney, & Robinson, 1952; Butler, 1974; Keiser-Nielsen, 1963; Schmidt & Fulton, 1982; Siegel, Sperber, & Trieglaff, 1977; Strom, 1968; Turner, 1975); this use has subsequently continued in work about using genetic material for similar purposes (Ge, Budowle, & Chakraborty, 2011; Huffine, Crews, Kennedy, Bomberger, & Zinbo, 2001; Kuo, 1982; Lorente et al., 2000; Shcherbakov, 2001). Second, discussion focused on the status in law of the adult missing person as deceased or non-deceased; for example, relating to release of their estate (Fawcett, 1950; Gordon Gose & Hawley, 1956; McCall, 1965; Roth, 1962). Finally, use of the term centred on police and other agencies' investigative techniques including descriptions of technological advances including thermal imaging (Helmer, Schimmler, & Rieger, 1989; Young, 1977), aerial infra-red camera use (Dickinson, 1976), and procedural advances related to all missing persons' searches, including adults (Goodall, 1965; Wood, 1951; Zoglio, 1980). This use has continued with a superficial focus-change to newer technologies including ground-penetrating radar (Instanes, Lønne, & Sandaker, 2004; Ruffell, 2005) and computerised database management (Haglund, 1993). Little academic work published pre-1980 was empirical, and it rarely examined issues such as the responses of the missing persons' family or loved ones to their loss (Meyer, 1981), or the characteristics of missing people (Hirschel & Lab, 1988).

Post-1999 the focus of work has broadened evidenced by further studies of the responses of family members' to missing persons' absence (Beder, 2002; Ela, 2004), alongside those of professionals responsible for working with missing persons (Payne, 1995); and accounts of investigations of mass disappearances in geopolitical conflict zones (Keough & Samuels, 2004). About half of the existing relevant academic work on Scopus was published post-2011. The most recent studies have been more diverse still, but, ultimately, have aimed to contribute to the active investigation and location of all missing persons: the development of computer software to recreate images of the clothes an individual was wearing at the time of disappearance (Khosla, Francionne, & Chu, 2007); or to modify images of persons who would have advanced considerably in age since they went missing (Cárdenas Esguerra, Vidal, Cavalcante-Neto, & Cavalcante Vieira, 2010). Other investigation- or location-oriented studies have examined the geographies of adult missing persons (Gibb & Woolnough, 2007; Shalev, Schaefer, & Morgan, 2009; Stevenson et al., 2013), and the effectiveness of public alerts and social media (Hattingh & Matthee, 2016; Lampinen & Moore, 2016; Lampinen, Arnal, & Hicks, 2009). Studies aimed at preventing episodes are much rarer but include examinations of the potential predictors of missing incidents involving those with dementia (Bantry White & Montgomery, 2015; Bowen, McKenzie, Steis, & Rowe, 2011).

Theoretical context

Theories relating to adult missing persons were virtually non-existent within the literature. Only one theory was identified however this focused specifically on missing incidents from mental health facilities and its application to all adult missing persons is questionable. In addition, two existing crime-related theories, namely distance decay and rational choice, were noted to have implicitly informed important research within the field and will be discussed as a result. Taxonomical work appears to be further advanced with regards to missing persons as four typologies have been proposed.

Theories

Distance decay (Brantingham & Brantingham, 1981) predicts that, in a series of crimes perpetrated by a single offender, incident likelihood decreases as a function of increasing distance from home- or work-base. The drivers of distance decay are described as the inherent financial, temporal, and practical costs of overcoming distance, and the information biases resulting from improved awareness of criminal opportunities in the base vicinity. Gibb and Woolnough (2007) reviewed 2200 missing person cases, including adults, from across the UK and cross-tabulated the time taken to location, distance travelled, and frequently occurring location sites, with demographic (males/females; adults/children) and psychopathological (people with psychosis, depression, dementia, and bipolar disorder) groups. They found that many individuals did not travel far, for example, 80% of males with depression were found no further than 8 km away from the missing locus, whilst females with depression were located just 5.7 km away. At face value, though not subject to inferential statistical tests, these data are consistent with distance decay theory, which in turn offers a possible explanation as to why many adult missing persons were located close to the place where they were originally reported missing from.

Rational choice theory (Cornish & Clarke, 1986) posits that perpetrators make spatially informed decisions that reflect the value they place on the relative benefits (material, emotional, or other) and risks (detection, punishment) of specific acts. Rational choice theory predicts a 'buffer zone' of crime-free activity in the immediate vicinity of an offenders' base resulting from his/her perception of increased risk of detection and apprehension. Shalev et al. (2009) analysed demographic and location-missing-to-location-found data from 70 solved adult missing person cases in the UK. About half of individuals went missing from their own home, and, of those who stayed in the UK, 40% returned there, meaning no travel distance could be calculated. The majority of others, however, who did not return home by their own accord stayed within 10 km. Interestingly, location overseas occurred as often as individuals returning to their home. These results are somewhat congruent with rational choice theory, since the effort made to go overseas by adult missing persons, may reflect a gain in terms of the perceived reduced likelihood of location.

Neither distance decay nor rational choice theory has been empirically studied in direct relation to adult missing persons (i.e. lack *empirical adequacy*); however, the ideas seem to have implicitly informed research related to the geographies of missing people. While both theories have some *internal coherence*, it is important to note that they only offer rather simplistic explanations for a complex human behaviour; essentially they lack *explanatory depth*. The theories also lack *unifying power* as they do not combine or integrate knowledge of adult missing persons, perhaps due to the dearth of dedicated research within the field, as already alluded to. Finally, *fertility* could also be questioned given the theories apparent failure to generate substantial new research or theory in the area of missing persons.

In relation to mental health settings, Bowers (2014) Safewards model conceptualises adult missing persons, or absconding, as one among a range of 'conflict' acts; others are aggression, rule-breaking, and treatment noncompliance. The model aims to explain, understand, prevent, and reduce these unwanted behaviours and the use of the coercive and restrictive 'containment' interventions (seclusion, enforced medication, locked doors) that are sometimes used to manage them. Safewards identifies six key elements which can trigger 'specific flashpoints' at which point the likelihood of unwanted conflict behaviour, including absconding, is increased: (i) ward staff; (ii) physical setting; (iii) external issues; (iv) patient community; (v) patients' personal characteristics; and (vi) regulatory framework. Safewards predicts that modifications to these six key elements through intervention will reduce the likelihood of flashpoints, and the subsequent occurrence of conflict behaviours. Proposed interventions focus on the principles of staff emotional self-regulation, positive appreciation of patients, and consistently applied ward rules. A related trial led to a reduction in absconding incidents specifically (Bowers, Simpson, & Alexander, 2005); and a cluster randomised controlled trial of a package of interventions ('The Safewards trial') for reduction of conflict and containment events, including absconding, led to a 15% reduction in a range of conflict events on intervention wards relative to control wards (Bowers et al., 2015).

Safewards therefore holds some *empirical adequacy*; it is an elegant theory, which integrates the constructs of conflict and containment (i.e. has *internal coherence*); the theory has *explanatory depth*, at least for absconding behaviour; and is clearly *fertile*, since it has generated considerable interest in the mental health nursing field. While the model

has unified some previously disparate literature on absconding (has a degree of *unifying power*) it has not incorporated knowledge about missing persons specifically; however, as demonstrated thus far, there is little to assimilate. Safewards is a mental health nursing practice model and so a key challenge is to ascertain whether elements of the model, including flashpoints and repeat absconding, are relevant to the adult missing person field more widely.

Typologies

Proposed typologies (Biehal et al., 2003; Bonny, Almond, & Woolnough, 2016; Henderson, Henderson, & Kiernan, 2000; Payne, 1995) comprising three to five main categories are all, at face value, parsimonious. Payne's (1995) five-category typology included *runaways* who made an impulsive decision to leave. This decisional aspect was echoed in Biehal et al.'s (2003) *intentional* category, which encompassed those making a decision to leave, and in Henderson et al.'s (2000) *independence/rebellion* category. Payne's *pushaways* felt forced to leave due to a negative home environment involving violence and abuse. Henderson et al. (2000) and Bonny et al. (2016) both posited an *escape* category covering similar ground; however, in the former case, escape could be from financial problems in addition to physical danger. Payne's (1995) *takeaways* were missing due to abduction, also categorised as *forced* (Biehal et al., 2003), and as *safety concerns* (Henderson et al., 2000). *Fallaways* (Payne, 1995) had simply lost contact with their family or social network; a similar group was labelled *drifters* (Biehal et al., 2003) and Henderson et al. (2000) identified an *unintentional* missing group comprising people who go missing due to dementia or other mental health concerns. Bonny et al.'s (2016) *miscommunication* category addressed unintentional absence from a different perspective; this group was characterised by people who had simply failed to let others know they were going away. Payne's (1995) *throwaways,* those thrown out of home, were not addressed in other typologies. Bonny et al. (2016) proposed a *dysfunctional* category who had gone missing due to involvement with alcohol and/or drugs, or suicidal intent, equivalent to the *safety concern* type in Henderson et al.'s (2000) typology.

In summary, typologies shared most constituent categories but no single typology contained all elements of the others; thus each fell somewhat short of true comprehensivity. Each typology transgressed *mutual exclusivity* since adult missing persons might easily be assigned to multiple groups (e.g. an individual might fit both Payne's *runaway* and *pushaway* categories simultaneously). Close inspection revealed different classes of taxa within the same typology. For example, adult missing persons were classified as, in our terms, *motivated or decision-making* (e.g. to escape a disadvantageous situation, suicidal intent, rebellion, impulsive decision), *subject to external agency* (rejected, abducted), and *behaviour* (drifted, wandered, miscommunicated, lost contact) within the same typology. In effect, all typologies comprised non-homogeneous, non-equivalent phenomena.

Surrogate terms

Identifying surrogate terms is considered to be a core component of Rodgers' (2000) evolutionary method of concept analysis. Tofthagen and Fagerstrøm (2010) describe surrogate terms as words that say the same thing as the chosen concept or, words that have

something in common with the chosen concept. Surrogate terms for 'missing person' in relation to adults (adult missing persons), which were identified from the previous literature, included runaways, pushaways, throwaways, throw-outs, takeaways, fallaways, drifters, mislaid, lost, elopement, absent, abducted/kidnapped, escapees, and disappeared. The terms absconding, absconder, absent without leave (AWOL), unauthorised leave, escape/escapees were used with specific reference to mental health service users who were missing from hospital.

Antecedents

A number of demographic and psychopathological variables, disproportionately present in adult missing persons, have been identified as risk markers or risk factors and are thus antecedents: young age (Biehal et al., 2003; Newiss, 2005; Shalev et al., 2009; Tarling & Burrows, 2004; UKMPB, 2017), male gender (Kiernan & Henderson, 2002; Newiss, 2005; Perkins, Roberts, & Feeney, 2011), and cognitive capacity, i.e. diagnosis of dementia (Bantry White & Montgomery, 2015; Bowen et al., 2011; Chung & Lai, 2011; Holmes et al., 2015; Houston et al., 2011; Rowe et al., 2011; Rowe & Glover, 2001). Incidents of adult missing persons from mental health facilities (more commonly referred to as absconding in the associated literature) involve younger, male patients with diagnosis of schizophrenia disproportionately (Dickens & Campbell, 2001; Gerace et al., 2015; Hearn, Ndegwa, Norman, Hammond, & Chaplin, 2012; Nurjannah, FitzGerald, & Foster, 2009; Simpson & Bowers, 2004; Wilkie, Penney, Fernane, & Simpson, 2014).

Antecedents of missing incidents associated with adult missing persons included active mental health problems, diagnosed and undiagnosed (Bayliss & Quinton, 2013; Biehal et al., 2003; Blakemore, Bossomaier, Foy, & Thomson, 2005; Bonny et al., 2016; Foy, 2006; Fyfe et al., 2015; Gibb & Woolnough, 2007; Clarke, 1999; Henderson et al., 2000; Hirschel & Lab, 1988; Holmes, Woolnough, Gibb, Lee, & Crawford, 2013; Missing People, 2011; Payne, 1995; Perkins et al., 2011; Samways, 2006; Shalev Greene & Hayden, 2014; Stevenson et al., 2013; Tarling & Burrows, 2004); on-going trauma, including sexual, physical, or domestic abuse (Foy, 2006; Henderson et al., 1999; Henderson et al., 2000; Hirschel & Lab, 1988; Home Office, 2011; Payne, 1995; Samways, 2006; Shalev Greene & Hayden, 2014; Stevenson et al., 2013; Tarling & Burrows, 2004; Yoder, Whitbeck, & Hoyt, 2001; Zerger, Strehlow, & Gundlapalli, 2008); relationship breakdown, family conflict, and family rejection (Henderson et al., 1999; Henderson et al., 2000; Payne, 1995; National Police Improvement Agency [NPIA], 2007; Newiss, 1999; Samways, 2006; Yoder et al., 2001; Zerger et al., 2008). Many young adults run away from home due to feeling neglected and unwanted (Yoder et al., 2001), experiencing life-worries and immediate social pressure (Payne, 1995), and self-harm and suicidal thoughts/intent, resulting in them becoming adult missing persons (Biehal et al., 2003; Bonny et al., 2016; Foy, 2006; Henderson et al., 2000; Perkins et al., 2011; Stevenson et al., 2013). Studies have highlighted drug and alcohol abuse as prominent antecedents (Blakemore et al., 2005; Bonny et al., 2016; Foy, 2006; Fyfe et al., 2015; Hirschel & Lab, 1988; Payne, 1995; Perkins et al., 2011; Shalev Greene & Hayden, 2014; Stevenson et al., 2013; Wilkie et al., 2014; Yoder et al., 2001; Zerger et al., 2008); and unemployment or financial pressure (Biehal et al., 2003; Clark, Warburton, & Tilse, 2009; Hirschel & Lab, 1988; Home Office, 2011; James et al., 2008; Payne, 1995; Samways, 2006; Tarling & Burrows, 2004; Zerger et al., 2008). In a

different vein, adult missing person episodes may be preceded by a desire for adventure (Hirschel & Lab, 1988) or for happiness and a fresh start (Biehal et al., 2003).

Antecedents also include purposeful preparation; for example, those who intend to be away for a long period of time may take clothes, cash, bank cards, and chequebooks (NPIA, 2007). Before leaving, some adult missing persons had booked hotels and made bank withdrawals to avoid being located (Stevenson et al., 2013).

Antecedents to adult missing person incidents from mental health facilities include receiving bad news (e.g. refusal of leave), homesickness, and worry about home, family members, and outside responsibilities (Beer, Muthukumaraswamy, Khan, & Musabbir, 2009; Bowers, Jarrett, Clark, Kiyimba, & McFarlane, 1999b; Martin & Thomas, 2014; Mezey, Durkin, Dodge, & White, 2015; Muir-Cochrane, Oster, Grotto, Gerace, & Jones, 2013; Nurjannah et al., 2009). Patients in forensic mental health settings (i.e. mentally disordered offenders) are commonly reported missing following a change of 'privilege level' such as reduction of agreed community access (Wilkie et al., 2014). Unsatisfactory treatment, for example, the perception of having a poor quality doctor, or medication change, were linked with missing incidents; as were disliking the ward, and negative concerns, including fear, about the staff or the other patients (Gerace et al., 2015; Martin & Thomas, 2014; Muir-Cochrane et al., 2013; O'Driscoll & Walmlsey, 2010; Wilkie et al., 2014). A significant proportion of adult missing persons voiced their intentions to leave to the ward staff well before their departure (Bowers et al., 1999b; Mosel, Gerace, & Muir-Cochrane, 2010; Wilkie et al., 2014). Personal irritation, frustration, boredom, and fears of stigmatisation have also been named as antecedents (Beer et al., 2009; Hearn et al., 2012; Meehan, Morrison, & McDougall, 1999; Mezey et al., 2015; Mosel et al., 2010; Muir-Cochrane et al., 2013; Nurjannah et al., 2009; O'Driscoll & Walmlsey, 2010; Wilkie et al., 2014). Finally, while the antecedents mentioned thus far were mainly experienced as 'push' factors, 'pull' factors comprised largely rational concerns such as worry for the security of one's empty property rather than disorder-related explanations such as active psychotic symptoms (Bowers, Jarrett, Clark, Kiyimba, & McFarlane, 1999a).

Adult missing persons with dementia were most commonly reported missing when there had been a gap in supervision, for example, they became separated from caregivers whilst on an outing or they left the home on their own whilst conducting independent routine tasks, such as going on a walk to a familiar location (Bantry White & Montgomery, 2015; Bowen et al., 2011; Chung & Lai, 2011; Holmes et al., 2015; Rowe et al., 2011; Rowe & Glover, 2001). Studies specific to those with Alzheimer's or dementia have also noted that agitation was a common antecedent to missing incidents, as were confrontational or angry encounters with caregivers and being in an 'unusual situation' beforehand, such as staying somewhere else overnight (Bowen et al., 2011; Rowe & Glover, 2001).

Consequences

Consequences for adult missing persons

On return, adult missing persons report having experienced fear, anxiety, and endangerment (Bonny et al., 2016; Payne, 1995). Specific fears included location and confrontation by the police, family, or friends, and negative reactions should they return home (Stevenson et al., 2013). As a result, risky anti-detection strategies including sleeping rough or staying with strangers were employed. Adult missing persons are at increased risk of

homelessness, and significantly less likely to seek routine and emergency health care with obvious deleterious consequences (Dang, Whitney, Virata, Binger, & Miller, 2012; Yoder et al., 2001). There is also an increased risk of drug abuse and/or prostitution (Bonny et al., 2016; Dang et al., 2012; Samways, 2006; Shalev et al., 2009; Stevenson et al., 2013; Tarling & Burrows, 2004). The emotional consequences of being an adult missing person may extend beyond return, particularly where the original stressors remain (Stevenson et al., 2013), and there may be a need for professional intervention (Henderson et al., 2000; James et al., 2008). A major consequence of having been an adult missing person, therefore, is increased risk of being so again (Biehal et al., 2003; Holmes, 2014; Kiernan & Henderson, 2002).

The vast majority (96%) of all missing persons, including adults, are found safe and well (Tarling & Burrows, 2004); however, the remainder remain untraced, are found deceased, or located having been seriously injured or in poor physical health in roughly equal amounts. The risk of a fatal outcome increases with age and sex; for example, cancelled missing person's reports involving those aged over 18 were considerably more likely to result in death than those aged 18 and under (Newiss, 2006). Further, in a study of adults reported missing after a night out, men were at higher risk of death (Newiss, 2011). There is also an increased risk of self-harm, suicide, accidental death or injury, robbery, and physical or sexual assault amongst the missing population (Biehal et al., 2003; Blakemore et al., 2005; Bonny et al., 2016; Newiss, 1999; Shalev et al., 2009; Smith & Shalev Greene, 2015; Stevenson et al., 2013; Tarling & Burrows, 2004).

Adults missing from mental health settings are at increased risk of suicide compared with patients who are not reported missing; one quarter of inpatient suicides involve adult missing persons (Hunt et al., 2010). They also have longer admission periods, possibly because treatment noncompliance results in increased risk (Bowers et al., 1999a; Dickens & Campbell, 2001; Gerace et al., 2015; Hearn et al., 2012; Meehan et al., 1999; Mezey et al., 2015; Mosel et al., 2010; O'Driscoll & Walmlsey, 2010; Stewart & Bowers, 2011). In contrast, Bowers, Jarrett, Clark, Kiyimba, and McFarlane (1999c) identified favourable, self-perceived consequences for adult missing persons themselves including a sense of freedom, seeing relatives, spending time at home, and relief from the unit as a result of absconding.

Whilst only a small proportion of adult missing persons with symptoms of dementia come to serious harm, the most common adverse consequences were falling, hypothermia, dehydration, and road accidents (Bantry White & Montgomery, 2015; Koester, 1998; Koester & Stooksbury, 1995; Rowe & Glover, 2001).

Consequences for others

Friends and family are affected by traumatic loss, frustration, sadness and worry, guilt, confusion, and anger at their inability to understand why the individual is missing (Basharat, Zubair, & Mujeeb, 2014; Clark et al., 2009; Henderson et al., 1999; Holmes, 2008, 2014; Kiernan & Henderson, 2002), sometimes leading to increased risk of going missing themselves (Clark et al., 2009; Henderson et al., 1999). Friends and family have reported taking health-related time off work, paying significant fees for independent searches for the person, and may also take on the responsibility for paying bills and debt left behind by the missing person in order to maintain their lifestyle for when they return (Holmes, 2008).

In prolonged episodes, family and friends may never discover what has happened to the individual (Home Office, 2011; Newiss, 2005). Based on interviews with families of

individuals reported missing following the 9/11 terror attacks, Boss (2002) suggested that they experienced 'ambiguous loss': a state of 'not knowing' characterised by presumed but unconfirmed death resulting in an inability to move on in a psychological and emotional sense. In cases where the individual does return home, reconnection can be a difficult, unhappy, and slow experience (Holmes, 2014). The wish to resume contact may not be mutual, which can evoke severe emotional distress (Holmes, 2014).

Missing incidents involving adults with dementia can also result in significant consequences for family and caregivers. Holmes et al. (2015) note that worry is common, and is often attributed towards concerns for future risk to their personal safety while home alone including injury or risk of exploitation. As a result, increased vigilance is perceived to be necessary and caregivers have considered having their relatives institutionalised or have employed prevention methods including constant monitoring and the installation of door alarms (Holmes et al., 2015; Houston et al., 2011). These are time-consuming and financially costly endeavours and caregivers may suffer employment disruptions or financial worries as a result (Alzheimer's Association, 2012).

Adult missing person episodes are common, labour-intensive, and thus a significant financial burden (Shalev Greene & Pakes, 2014). In relation to mental health settings in the UK, police are involved in returning a third of adult missing persons reported on multiple occasions (Bartholomew, Duffy, & Figgins, 2009) at an estimated cost of £879,060 for the 'top ten' institutional facilities (Hayden & Shalev Greene, 2016). Police services face severe criticism and adverse publicity if they fail to locate a high profile missing person (Swanton & Wilson, 1989) and, despite the need to further understand missing behaviour, police officers tend to see return-home interviews for adult missing persons as repetitive and unhelpful (Harris & Shalev Greene, 2016). Understandably, therefore, family members can view the police response as lacking urgency, dismissive, or insensitive (Clark, 2012; Parr & Stevenson, 2013). Similarly, mental health services suffer reputational damage, loss of public confidence, legal liability, and negative media exposure as a result of adult missing persons absconding from their facilities (Bowers et al., 1999c; Muir-Cochrane, Mosel, Gerace, Esterman, & Bowers, 2011; Muir-Cochrane & Mosel, 2009; Muir-Cochrane et al., 2013). Mental health staff and family members can experience low levels of morale, emotional distress, and may feel responsible for adults going missing (Beer et al., 2009; Mezey et al., 2015; Nurjannah et al., 2009; O'Driscoll & Walmlsey, 2010). Meehan et al. (1999) note that the additional workload can detract from the care of other patients (Bartholomew et al., 2009), and 'copycat' missing incidents by other patients may also occur (Martin & Thomas, 2014).

Attributes

Missing persons, including adult missing persons, are commonly identified as *absent* (Biehal et al., 2003; Payne, 1995; Swanton & Wilson, 1989) or as of *unknown whereabouts* (Association of Chief Police Officers [ACPO], 2005, 2013; Henderson & Henderson, 1998; James et al., 2008; Royal Canadian Mounted Police [RCMP], 2015; Swanton & Wilson, 1989). Authors commonly qualify the absence such that it must constitute an interference with expected social responsibilities (Payne, 1995; Swanton & Wilson, 1989), or be unexpected by, distressing, or unacceptable to those within the person's social circle (Biehal et al., 2003).

The perception of risk of actual or potential harm among those affected by the absence is a key attribute (ACPO, 2005, 2013; Bayliss & Quinton, 2013; Henderson & Henderson, 1998; James et al., 2008). Risk is codified in police missing persons' operational procedures: when a missing person's report is made, a risk assessment will inform the level of urgency and level of resources to be assigned to the investigation. Those deemed at high risk are believed to pose an immediate and grave threat to themselves or others and may be considered extremely vulnerable or dangerous. Those deemed at medium risk are considered a 'likely' threat, and those at low risk are considered no apparent threat to self or to the public (ACPO, 2005, 2013). Irrespective of perceived risk level, some authors have stated that a core attribute of a missing person, including adults, is that he/she has been reported to the legal authorities (Henderson & Henderson, 1998; RCMP, 2015) and that missing person status is, once conferred, on-going until location (RCMP, 2015).

The key attribute of adults missing from mental health units is absence from hospital (Meehan et al., 1999; O'Driscoll & Walmlsey, 2010), specifically when unauthorised by the appropriate medical professional (Gerace et al., 2015; Hearn et al., 2012; Meehan et al., 1999; Mezey et al., 2015; O'Driscoll & Walmlsey, 2010). Other attributes involve idiosyncratic qualifiers, e.g. Gerace et al. (2015) define absconders as patients who are placed under an involuntary mental health order, suggesting that those who have voluntary patient status cannot be absconders. Persons may be considered absent but not as AWOL for periods of 1 hour until midnight on the same day (Bowers, Jarrett, Clark, Kiyimba, & McFarlane, 2000; Meehan et al., 1999) before being formally reported to the authorities.

Missing person exemplar

In order to ensure that a comprehensive description of the concept is given, Tofthagen and Fagerstrøm (2010) advocate the identification of a model example, which should effectively highlight the key components extracted during the core analysis phase. Parr and Stevenson (2013) discuss the case of 'Sophie', an adult female, diagnosed with depression who decided to go missing after taking an overdose. Sophie had emailed her mother and sister to inform them of her intentions causing them to become concerned for her well-being. They subsequently phoned the police to report her missing and engaged in a search for her, looking along all of her usual walking/running routes. Her mother and stepfather found her alive the next morning. Sophie never considered herself to be missing, despite being categorised as such by the police. She stated that she never intended or hoped for the police to be involved and that she was simply taking herself away to deal with her internal issues. Within this example, we can see many of the key antecedents, consequences, and attributes, which have been drawn out and discussed in the sections above.

Definition of a missing person

A central feature of the further analyses phase of the evolutionary concept analysis is that the key conceptual elements defined can be used to construct new or redefined terminology. Such reconceptualisation is often required due to natural dynamic development over time (Tofthagen & Fagerstrøm, 2010). It should however be noted that

this definition is not conclusive and should instead act as a base for future research to be built upon. We fully agree with the current ACPO (2013) operational policing definition of 'missing person' (see Table 1) and are not suggesting that it should be changed. However, based on the analysis presented in this paper we propose that an adult missing person can best be understood as:

> An individual, 18 years of age or older, whose whereabouts are unknown to members of their familial, social or professional networks and where there is concern for either their own safety and wellbeing or that of others. This may result in the initiation of a formal or informal search.

Discussion

We aimed to clarify how the term 'missing person' is used in relation to adults (adult missing persons) in professional and academic discourse. A limited body of literature was identified commencing in the 1960s and undergoing significant growth only in the past five years. Concept analysis revealed the core attributes of the adult missing person to be actual or perceived absence, usually unexpected and/or unwanted, and almost always accompanied by an absence of, or incomplete, information; and potential for an adverse risk outcome as perceived by those affected including family, friends, and authorities. The adult missing person concept transgresses category boundaries related to crime, victimhood, and intentionality; as a result, further core, shared attributes are rare. Given the many potential circumstances of, or ostensible *reasons for*, an incident, it is unsurprising that the antecedents are multiple and varied, that the consequences range from benign, even positive, to fatal, and that they affect others beyond the adult missing person themselves.

While the observations above are neither new nor especially insightful (Biehal et al., 2003; Henderson et al., 2000; Payne, 1995; Stevenson et al., 2013), we suspect that more interesting findings lie in our exposition of the contextual elements in which the concept is situated. First, the theoretical context provides underdeveloped and limited means to understand adult missing persons. Theories of distance decay and rational behaviour are primarily aimed at informing missing person investigations, specifically location, rather than at understanding or preventing incidents that may be better informed from a psychological perspective. In any event, the theories have not been adequately tested in the context of any missing persons, including adults. The only other theory to be proposed (Bowers, 2014) relates to a wide range of conflict and containment behaviours in the inpatient mental health setting. Safewards proposes that a range of influences, including patient characteristics, underlie adult missing person or absconding behaviour. While influences such as ward staff or other patients probably render the model ecologically invalid for generalisability, it does offer a starting point for thinking about the phenomenon of adult missing persons as multivariate in nature, and as aiming to inform prevention rather than investigation primarily.

Below theory-level, proposed typologies, classifying adult missing person incidents as types (Biehal et al., 2003; Bonny et al., 2016; Henderson et al., 2000; Payne, 1995) have resulted in category assignment for reasons of individual and external agency (i.e. choice and forced by persons or environmental circumstances respectively) together with multiple subcategorical motivations or ostensible 'reasons' (e.g. escape, financial),

and related behaviours (either observed or imputed, e.g. 'drifted'). Consequently, classification of incidents (or people) to a type could involve decisions about whether the incident involves a crime, and, if so, one committed by the missing person or one for which they are culpable. Further, the perceived risk central to the adult missing person concept may relate to the missing individual themselves (e.g. suicidal or environmental extremes) or others (e.g. person is considered violent). Issues regarding the intentionality of the adult missing person add further complexity: is the episode the result of choice, confusion, disorientation, accident, or maleficence? From this perspective, it is apparent that the adult missing person concept transcends classifications of theories of crime – or, more accurately, human behaviour – as manifestations of underlying biological, psychological, environmental, or sociological processes; and narrower crime-specific theories or approaches. For example, aspects of victimology (Karmen, 2003), social disorganisation theory (Kubrin & Weitzer, 2003), rational choice (Clarke, 1997), and crime analysis (Boba, 2005) may all have valence. In particular, the latter appears to be one of the favoured approaches to the study of missing persons, including adults, also evidenced by the preponderance in the empirical literature of theoretical typologies and presentations of statistical data.

We propose that 'missing persons' in relation to adults simply does not constitute a construct that is explicable by a single unifying theory. Rather, the phenomenon of adult missing persons is relevant to domains of detection and investigation, and to what we might term clinical domains. The first is concerned with location and investigation, and the second with prevention and treatment/intervention. The two may require further delineation for the purposes of theoretical advancement and empirical study. Currently, the phenomenon and, more importantly, the resources are targeted at the domains of detection and investigation. Since 'being missing' does not constitute a crime per se, there is a lack of dedicated resource for the clinical domain. Even if we could better establish the key psychological drivers of adult missing person status, or demonstrate targeted interventions to reduce risk of being missing, there is no obvious professional group who would deliver this in the community. In stark contrast, targeted intervention aimed at reducing adult missing person incidents in mental health settings have been tested and found effective (Bowers, 2014; Bowers et al., 2005; Bowers et al., 2015).

Recently, Parr and Fyfe (2013) have called for greater contributions to the field from the discipline-specific context of human geography. While we welcome any activity that extends understanding of adult missing persons, we suggest that it is the disciplines related to the behavioural sciences and, specifically in relation to incidents from within mental health facilities, mental health nursing which have the greater potential for theoretical development, particularly in the clinical domain. Parr and Fyfe (2013) allude to the preponderance of 'mental health problems' as drivers of many missing incidents as if this *in itself* constituted a coherent and consistent set of characteristics rather than a vague term representing a wildly disparate set of problems, difficulties, and symptoms; a problem which is mirrored in the over-use of the term 'missing person' to refer to, and describe all individuals reported missing. It is likely that specific mental disorders, or that characteristics of clusters of disorders, might play a role. For example, in the firesetting literature, McEwan and Ducat (2016) have highlighted how 'impulsivity' is a key feature of the diagnoses most commonly found in people who have set deliberate fires (e.g.

disorders of personality, psychosis, and neurodevelopment). We propose a widening of the scope suggested by Parr and Fyfe (2013) from mental health factors to psychological factors more generally. Factors that have commonly been investigated in relation to other issues operating at the clinical practice – criminal justice interface include the role of cognition, proclivity, attribution, and emotion in addition to the role of developmental, mental health, and substance abuse. These are issues which are noticeably absent from the current adult missing persons literature and exploration in more depth would be welcome. While it is certainly not our intention to equate being an adult missing person with issues like being a sex offender, a firesetter, or a violent recidivist, we propose that lessons can be learned from the research approaches used in these topic areas and translated to better develop theory. The overall aim of future development in the clinical domain of adult missing persons should be to establish and test an evidence-based, multivariate model, and use it as a basis for development of interventions. There is scope for optimism since our concept analysis detected a significant broadening of focus in recent years. However, there is still a considerable distance to travel and progress will remain a pipe-dream without a shift of emphasis.

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References

Alzheimer's Association. (2012). Alzheimer's disease facts and figures. *Alzheimer's & Dementia*, *8*(2), 1–61.
Association of Chief Police Officers. (2005). *Guidance on the management, recording and investigation of missing persons*. Wyboston: College of Policing.
Association of Chief Police Officers. (2013). *Interim guidance on the management, recording and investigation of missing persons*. Wyboston: College of Policing.
Bang, G. (1972). Factors of importance in dental identification: Five case reports. *Forensic Science*, *1*(1), 91–102. doi:10.1016/0300-9432(72)90151-3
Bantry White, E., & Montgomery, P. (2015). Dementia, walking outdoors and getting lost: Incidence, risk factors and consequences from dementia-related police missing-person reports. *Aging and Mental Health*, *19*(3), 224–230. doi:10.1080/13607863.2014.924091
Bartholomew, D., Duffy, D., & Figgins, N. (2009). *Strategies to reduce missing patients: A practical workbook*. London: National Mental Health Development Unit.
Basharat, A., Zubair, A., & Mujeeb, A. (2014). Psychological distress and coping strategies among families of missing persons in Pakistan. *Journal of the Indian Academy of Applied Psychology*, *40*(2), 211–220.
Bayliss, A., & Quinton, P. (2013). *Risk, bureaucracy and missing persons. An evaluation of a new approach to the initial police response*. Wyboston: College of Policing.
Beder, J. (2002). Mourning the unfound: How we can help. *Families in Society*, *83*(4), 400–403. doi:10.1606/1044-3894.9

Beer, M. D., Muthukumaraswamy, A., Khan, A. A., & Musabbir, M. A. (2009). Clinical predictors and pat-terns of absconding in a low secure challenging behaviour mental health unit. *Journal of Psychiatric Intensive Care*, *5*(2), 81–87.

Berry, D.C. & Hunt, C. (1967). Identification by dental characteristics. *Medicine, Science and the Law*, *7* (2), 67–69. doi:10.1177/002580246700700206

Biehal, N., Mitchell, F., & Wade, J. (2003). *Lost from view: Missing persons in the UK*. Bristol: Policy Press.

Blakemore, K., Bossomaier, T., Foy, S., & Thomson, D. (2005). Data mining of missing persons data. *Studies in Computational Intelligence*, *4*, 305–314. doi:10.1007/11011620_19

Boba, R. (2005). *Crime analysis defined*. In R. Boba (Ed.), *Crime analysis and crime mapping* (pp. 5–18). Thousand Oaks, CA: Sage.

Bonny, E., Almond, L., & Woolnough, P. (2016). Adult missing persons: Can an investigative framework be generated using behavioural themes? *Journal of Investigative Psychology and Offender Profiling*, *13*(3), 296–312. doi:10.1002/jip.1459

Boss, P. G. (2002). Ambiguous loss: Working with families of the missing. *Family Process*, *41*(1), 14–17. doi:10.1111/j.1545-5300.2002.40102000014.x

Botes, A. (2002). Concept analysis: Some limitations and possible solutions. *Curationis*, *25*(3), 23–27.

Bowen, M. E., McKenzie, B., Steis, M., & Rowe, M. (2011). Prevalence of and antecedents to dementia-related missing incidents in the community. *Dementia and Geriatric Cognitive Disorders*, *31*(6), 406–412. doi:10.1159/000329792

Bowers, L. (2014). Safewards: A new model of conflict and containment on psychiatric wards. *Journal of Psychiatric and Mental Health Nursing*, *21*(6), 499–508. doi:10.1111/jpm.12129

Bowers, L., James, K., Quirk, A., Simpson, A., Stewart, D., & Hodsoll, J. (2015). Reducing conflict and containment rates on acute psychiatric wards: The safewards cluster randomised controlled trial. *International Journal of Nursing Studies*, *52*(9), 1412–1422. doi:10.1016/j.ijnurstu.2015.05.001

Bowers, L., Jarrett, M., & Clark, N. (1998). Absconding: A literature review. *Journal of Psychiatric and Mental Health Nursing*, *5*(5), 343–353. doi:10.1046/j.1365-2850.1998.00149.x

Bowers, L., Jarrett, M., Clark, N., Kiyimba, F., & McFarlane, L. (1999a). Absconding: Why patients leave … part 1. *Journal of Psychiatric and Mental Health Nursing*, *6*(3), 199–205. doi:10.1046/j.1365-2850. 1999.630199.x

Bowers, L., Jarrett, M., Clark, N., Kiyimba, F., & McFarlane, L. (1999b). Absconding: How and when patients leave the ward … part 2. *Journal of Psychiatric and Mental Health Nursing*, *6*(3), 207–211. doi:10.1046/j.1365-2850.1999.630207.x

Bowers, L., Jarrett, M., Clark, N., Kiyimba, F., & McFarlane, L. (1999c). Absconding: Outcome and risk … part 3. *Journal of Psychiatric and Mental Health Nursing*, *6*(3), 213–218. doi:10.1046/j.1365-2850. 1999.630213.x

Bowers, L., Jarrett, M., Clark, N., Kiyimba, F., & McFarlane, L. (2000). Determinants of absconding by patients on acute psychiatric wards. *Journal of Advanced Nursing*, *32*, 644–649. doi:10.1046/j. 1365-2648.2000.01523.x

Bowers, L., Simpson, A., & Alexander, J. (2005). Real world application of an intervention to reduce absconding. *Journal of Psychiatric and Mental Health Nursing*, *12*(5), 598–602. doi:10.1111/j.1365-2850.2005.00879.x

Bowers, L., & Stewart, D. (2010). *Absconding from psychiatric hospitals: A literature review*. London: Institute of Psychiatry.

Brantingham, P. J., & Brantingham, P. L. (1981). Notes on the geometry of crime. In P. J. Brantingham & P. L. Brantingham (Eds.), *Environmental criminology* (pp. 27–54). Beverly Hills, CA: Sage.

Brown, K. A. (1984). Dental identification of unknown bodies. *Annals of the Academy of Medicine Singapore*, *13*(1), 3–7.

Brown, T. C., Delaney, R. D., & Robinson, B. A. (1952). Medical identification in the 'Noronic' disaster. *JAMA*, *148*(8), 621–627. doi:10.1001/jama.1952.02930080031009

Butler, O. H. (1974). Unidentified bodies and missing persons: Circulation of dental data for identifi-cation. *Journal of the Forensic Science Society*, *14*(3), 223–224. doi:10.1016/S0015-7368(74)70905-7

Cárdenas Esguerra, M. I., Vidal, C. A., Cavalcante-Neto, J. B., & Cavalcante Vieira, R. C. (2010). *Towards the solution of the missing persons problem by simulated reproduction of virtual characters*. 23rd

SIBGRAPI Conference on Graphics, Patterns and Images, SIBGRAPI, 30 August–3 September 2010 Washington DC, pp. 301–308.

Chinn, P. L., & Kramer, M. K. (2011). *Integrated theory and knowledge development in nursing* (8th ed.). St. Louis, MO: Elsevier.

Chung, J. C. C., & Lai, C. K. Y. (2011). Elopement among community-dwelling older adults with dementia. *International Psychogeriatrics*, *23*(1), 65–72. doi:10.1017/S1041610210000657

Clark, J. (2012). 'You are going to drop the ball on this … ': Using siblings' stories to inform better interprofessional practice when someone goes missing. *Police Practice and Research*, *13*(1), 31–43. doi:10.1080/15614263.2011.574069

Clark, J., Warburton, J., & Tilse, C. (2009). Missing siblings: Seeking more adequate social responses. *Child and Family Social Work*, *14*(3), 267–277. doi:10.1111/j.1365-2206.2008.00593.x

Clarke, R. V. (1997). *Situational crime prevention: Successful case studies.* (2nd ed.). Guilderland, NY: Harrow and Heston.

College of Policing. (2016). Missing persons. Retrieved from https://www.app.college.police.uk/app-content/major-investigation-and-public-protection/missing-persons/#definition-of-missing

Cornish, D. B., & Clarke, R. V. (1986). *The reasoning criminal: Rational choice perspectives on offending*. New York, NY: Springer-Verlag.

Cronin, P., Ryan, F., & Coughlan, M. (2010). Concept analysis in healthcare research. *International Journal of Therapy and Rehabilitation*, *17*(2), 62–68. doi:10.12968/ijtr.2010.17.2.46331

Dang, M. T., Whitney, K. D., Virata, M. C. D., Binger, M. M., & Miller, E. (2012). A web-based personal health information system for homeless youth and young adults. *Public Health Nursing*, *29*(4), 313–319. doi:10.1111/j.1525-1446.2011.00998.x

Dickens, G. L., & Campbell, J. (2001). Absconding of patients from an independent UK psychiatric hospital: A 3-year restrospective analysis of events and characteristics of absconders. *Journal of Psychiatric and Mental Health Nursing*, *8*(6), 543–550. doi:10.1046/j.1351-0126.2001.00426.x

Dickens, G., Sugarman, P., & Gannon, T. A. (Eds). (2012). *Firestting and mental health: Theory, research and practice*. London: RCPsych Publications.

Dickinson, D. J. (1976). The aerial use of an infrared camera in a police search for the body of a missing person in New Zealand. *Journal of the Forensic Science Society*, *16*(3), 205–211. doi:10.1016/S0015-7368(76)71062-4

Dreifuerst, K. T. (2009). The essentials of debriefing in simulation learning: A concept analysis. *Nursing Education Perspectives*, *30*(2), 109–114.

Ela, G. K. (2004). Epidemiology of wilderness search and rescue in New Hampshire, 1999-2001. *Wilderness and Environmental Medicine*, *15*(1), 11–17. doi:10.1580/07-WEME-OR-141.1

Endacott, R. (1997). Clarifying the concept of need: A comparison of two approaches to concept analysis. *Journal of Advanced Nursing*, *25*, 471–476.

Fawcett, J. E. S. (1950). Convention on declaration of death of missing persons. *The International Law Quarterly*, *3*(3), 446–449.

Foy, S. (2006). *Profiling missing persons within New South Wales* (PhD thesis). Charles Sturt University, Australia.

Fyfe, N., Parr, H., Stevenson, O., & Woolnough, P. (2015). 'To the end of the world': Space, place, and missing persons investigations. *Policing: A Journal of Policy and Practice*, *9*(3), 275. doi:10.1093/police/pav025

Gannon, T. A., Ward, T., & Collie, R. (2007). Cognitive distortions in child molesters: Theoretical and research developments over the past two decades. *Aggression and Violent Behavior*, *12*(4), 402–416. doi:10.1016/j.avb.2006.09.005

Ge, J., Budowle, B., & Chakraborty, R. (2011). Choosing relatives for DNA identification of missing persons. *Journal of Forensic Sciences*, *56*(1), S23–S28. doi:10.1111/j.1556-4029.2010.01631.x

Gerace, A., Oster, C., Mosel, K., O'Kane, D., Ash, D., & Muir-Cochrane, E. (2015). Five-year review of absconding in three acute psychiatric inpatient wards in Australia. *International Journal of Mental Health Nursing*, *24*(1), 28–37. doi:10.1111/inm.12100,

Gerrig, R. J., & Zimbardo, P. G. (2002). *Psychology and life* (16th ed.). Boston, MA: Allyn and Bacon.

Gibb, G., & Woolnough, P. (2007). *Missing persons: Understanding planning responding*. Aberdeen: Grampian Police Force.

Gibbons, D. C. (1975). Offender typologies – two decades later. *British Journal of Criminology*, *15*, 140–156.

Goodall, T. M. (1965). Criminal investigation: The Dumbarton murder. *Police Journal*, *38*, 117. doi:10.1177/0032258X6503800305

Gordon Gose, J., & Hawley, J. W. (1956). Probate legislation enacted by the 1955 session of the Washington legislature. *Washington Law Review*, *31*, 22.

Haglund, W. D. (1993). The National Crime Information Center (NCIC) missing and unidentified persons system revisited. *Journal of Forensic Sciences*, *38*(2), 365–378. doi:10.1520/JFS13417J

Harris, M., & Shalev Greene, K. (2016). Police attitudes in England to return interviews, in repeat missing person cases. *Journal of Investigative Psychology and Offender Profiling*, *13*(3), 253–266. doi:10.1002/jip.1455

Hattingh, M., & Matthee, M. (2016). Using Facebook to find missing persons: A crowd-sourcing perspective. In Y. Dwivedi (Ed.), *Social media: The good, the Bad, and the ugly. I3E 2016. Lecture notes in computer science, 9844* (pp. 685–694). Cham: Springer International Publishing. doi:10.1007/978-3-319-45234-0_61

Hayden, C., & Shalev Greene, K. (2016). The blue light social services? Responding to repeat reports to the police of people missing from institutional locations. *Policing and Society*. 1–17. doi:10.1080/10439463.2016.1138475

Hearn, D., Ndegwa, D., Norman, P., Hammond, N., & Chaplin, E. (2012). Developing the leave/abscond risk assessment (LARA) from the absconding literature: An aide to risk management in secure services. *Advances in Mental Health and Intellectual Disabilities*, *6*(6), 280–290. doi:10.1108/20441281211285919

Helfgott, J. B. (2008). *Criminal behavior: Theories, typologies and criminal justice*. Chicago, IL: Sage.

Helmer, R., Schimmler, J., & Rieger, J. (1989). On the conclusiveness of skull identification via the video superimposition technique from the point of view of the craniometric individuality of human skulls. *Zeitschrift für Rechtsmedizin*, *102*(7), 451–459. doi:10.1007/BF00204076

Henderson, M., & Henderson, P. (1998). *Missing people: Issues for the Australian community*. Canberra: Commonwealth of Australia.

Henderson, M., Henderson, P., & Kiernan, C. (1999). *The missing person dimension*. Children and Crime: Victims and Offenders Conference Convened by the Australian Institute of Criminology, 17–18 June 1999 Brisbane, Australia.

Henderson, M., Henderson, P., & Kiernan, C. (2000). *Missing persons: Incidence, issues and impacts (No. 144)*. Canberra, ACT: Australian Institute of Criminology.

Hirschel, J. D., & Lab, S. P. (1988). Who is missing? The realities of the missing persons problem. *Journal of Criminal Justice*, *16*(1), 35–45.

Holmes, L. (2008). *Living in limbo: The experiences of, and impacts on, the families of missing people*. London: Missing People.

Holmes, L. (2014). *When the search is over. Reconnecting missing children and adults*. London: Missing People.

Holmes, L., Shalev Greene, K., Clark, C., & Pakes, F. (2015). *The impact of living with missing incidents: How the experience and fear of missing incidents affects people with dementia and those who care for them*. Alzheimer Europe Conference, 2–4 September 2015 Ljubljana, Slovenia.

Holmes, L., Woolnough, P., Gibb, G. J., Lee, R. L., & Crawford, M. (2013). *Missing persons and mental health*. First International Conference on Missing Children and Adults, 18–20 June 2013 Portsmouth, UK.

Home Office. (2011). *Missing children and adults: A cross government strategy*. London: Author.

Houston, A. M., Brown, L. M., Rowe, M. A., & Barnett, S. D. (2011). The informal caregivers' perception of wandering. *American Journal of Alzheimers Disease & Other Dementias*, *26*(8), 616–622.

Huffine, E., Crews, J., Kennedy, B., Bomberger, K., & Zinbo, A. (2001). Mass identification of persons missing from the break-up of the former Yugoslavia: Structure, function, and role of the international commission on missing persons. *Croatian Medical Journal*, *42*(3), 271–275.

Hunt, I., Windfuhr, K., Swinson, N., Shaw, J., Appleby, L., Kapur, N. & The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (2010). Suicide amongst psychiatric

in-patients who abscond for the ward: A national clinical survey. *BioMed Central Psychiatry*, *10*, 14. doi:10.1186/1471-244X-10-14

Instanes, A., Lønne, I., & Sandaker, K. (2004). Location of avalanche victims with ground-penetrating radar. *Cold Regions Science and Technology*, *38*(1), 55–61. doi:10.1016/j.coldregions.2003.08.002

James, M., Anderson, J., & Putt, J. (2008). *Missing persons in Australia. Trends and issues in crime and criminal justice (No. 353)*. Canberra: Australian Institute of Criminal Justice.

Karmen, A. (2003). *Crime victims: An introduction to victimology* (8th ed). Albany, NY: Wadsworth.

Keiser-Nielsen, S. (1963). Dental investigation in mass disasters. *Journal of Dental Research*, *42*(1), 303–311. doi:10.1177/00220345630420013201

Keough, M. E., & Samuels, M. F. (2004). The Kosovo family support project: Offering psychosocial support for families with missing persons. *Social Work*, *49*(4), 587–594. doi:10.1093/sw/49.4.587

Khosla, R., Francionne, D., & Chu, D. (2007). *Intelligent online web based interactive missing person clothing identification system*. IEEE International Conference on Systems, Man and Cybernetics, 8–11 October 2006 Taipei, Taiwan, 4022. doi:10.1109/ICSMC.2006.384762

Kiernan, C., & Henderson, M. (2002). *Missing persons: Extending traditional policing boundaries to address a social issue*. Third Australasian Women and Policing Conference, 23 October 2002 Canberra, Australia.

Koester, R. J. (1998). *The lost Alzheimer's and related disorders subject: New research and perspectives*. Response 98 NASAR Proceedings. National Association of Search and Rescue, Chantilly, Virginia, pp. 165–181.

Koester, R. J., & Stooksbury, D. E. (1995). Behavioral profile of possible Alzheimer's disease patients in virginia search and rescue incidents. *Wilderness & Environmental Medicine*, *6*(1), 34–43. doi:10.1016/S1080-6032(13)80007-5

Kubrin, C. E., & Weitzer, R. (2003). New directions in social disorganization theory. *Journal of Research in Crime and Delinquency*, *40*, 374–402. doi:10.1177/0022427803256238

Kuo, M. C. (1982). Linking a bloodstain to a missing person by genetic inheritance. *Journal of Forensic Sciences*, *27*(2), 438–444. doi:10.1520/JFS11501J

Lampinen, J. M., Arnal, J., & Hicks, J. L. (2009). The effectiveness of supermarket posters in helping to find missing children. *Journal of Interpersonal Violence*, *24*(3), 406–423. doi:10.1177/0886260508317184

Lampinen, J. M., & Moore, K. N. (2016). Missing person alerts: Does repeated exposure decrease their effectiveness? *Journal of Experimental Criminology*, *12*(4), 1–12. doi:10.1007/s11292-016-9263-1

Lorente, J. A., Entrala, C., Alvarez, J. C., Lorente, M., Villanueva, E., Carrasco, F., & Budowle, B. (2000). Missing persons identification: Genetics at work for society. *Science*, *290*(5500), 2257–2258. doi:10.1159/000334982

Malloch, M., & Burgess, C. (2011). Responding to young runaways: Problems of risk and responsibility. *Youth Justice*, *11*, 61–76. doi:10.1177/1473225410394281

Martin, T., & Thomas, S. D. (2014). Police officers' views of absconding from mental health units in Victoria, Australia. *International Journal of Mental Health Nursing*, *23*(2), 145–152. doi:10.1111/inm.12036

McCall, F. B. (1965). Estates of missing persons in North Carolina. *North Carolina Law Review*, *44*(2), 275–289. Retrieved from http://scholarship.law.unc.edu/nclr/vol44/iss2/1/?utm_source=scholarship.law.unc.edu%2Fnclr%2Fvol44%2Fiss2%2F1andutm_medium=PDFandutm_campaign=PDFCoverPages

McEwan, T. E., & Ducat, L. (2016). The role of mental disorder in firesetting behaviour. In R. M. Doley, G. L. Dickens, & T. A. Gannon (Eds.), *The psychology of arson: A practical guide to understanding and managing deliberate firesetters* (pp. 211–227). London: Routlegde.

Meehan, T., Morrison, P., & McDougall, S. (1999). Absconding behaviour: An exploratory investigation in an acute inpatient unit. *Australian and New Zealand Journal of Psychiatry*, *33*(4), 533–537. doi:10.1080/j.1440-1614.1999.00603.x

Meyer, J. E. (1981). The grief for missing persons – An interview of wives, children and siblings. *Archiv für Psychiatrie und Nervenkrankheiten*, *230*(2), 91–101. doi:10.1007/BF00345170

Mezey, G., Durkin, C., Dodge, L., & White, S. (2015). Never ever? Characteristics, outcomes and motivations of patients who abscond or escape: A 5-year review of escapes and absconds from two

medium and low secure forensic units. *Criminal Behaviour and Mental Health*, *25*(5), 440–450. doi:10.1002/cbm.1982

Missing People. (2011). *Safeguarding and reconnecting missing people. Improving safe information sharing to support vulnerable adults*. London: Author.

Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., … Stewart, L. A. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic Reviews*, *4*(1). doi:10.1186/2046-4053-4-1

Mosel, K. A., Gerace, A., & Muir-Cochrane, E. (2010). Retrospective analysis of absconding behaviour by acute care consumers in one psychiatric hospital campus in Australia. *International Journal of Mental Health Nursing*, *19*(3), 177–185. doi:10.1111/j.1447-0349.2009.00660.x

Muir-Cochrane, E., & Mosel, K. (2009). A retrospective analysis of absconding behaviours by psychiatric inpatients in one psychiatric hospital campus in Australia. *Journal of Psychiatric and Mental Health Nursing*, *16*(2), 211–213. doi:10.1111/j.1365-2850.2008.01344.x

Muir-Cochrane, E., Mosel, K., Gerace, A., Esterman, A., & Bowers, L. (2011). The profile of absconding psychiatric inpatients in Australia. *Journal of Clinical Nursing*, *20*(5), 706–713. doi:10.1111/j.1365-2702.2010.03553.x

Muir-Cochrane, E., Oster, C., Grotto, J., Gerace, A., & Jones, J. (2013). The inpatient psychiatric unit as both a safe and unsafe place: Implications for absconding. *International Journal of Mental Health Nursing*, *22*(4), 304–312. 10.1111/j.1447-0349.2012.00873.x

National Police Improvement Agency. (2007). *Suggested lines of enquiry for suspicious missing persons investigations*. London: NPIA Crime Operational Support.

Newiss, G. (1999). *Missing presumed … ? The police response to missing persons. Police research series, 114*. London: Home Office.

Newiss, G. (2005). A study of the characteristics of outstanding missing persons: Implications for the development of police risk assessment. *Policing and Society*, *15*(2), 212–225. doi:10.1080/10439460500071655

Newiss, G. (2006). Understanding the risk of going missing: Estimating the risk of fatal outcomes in cancelled cases. *Policing: An International Journal of Police Strategies and Management*, *29*(2), 246–260. doi:10.1108/13639510610667655

Newiss, G. (2011). *Learning from fatal disappearances. A report by missing people*. London: Missing People.

Nurjannah, I., FitzGerald, M., & Foster, K. (2009). Patients' experiences of absconding from a psychiatric setting in Indonesia. *International Journal of Mental Health Nursing*, *18*(5), 326–335. doi:10.1111/j.1447-0349.2009.00611.x

O'Driscoll, D., & Walmlsey, J. (2010). Absconding from hospitals: A means of resistance? *British Journal of Learning Disabilities*, *38*(2), 97–102. doi:10.1111/j.1468-3156.2010.00638.x

Parr, H., & Fyfe, N. (2013). Missing geographies. *Progress in Human Geography*, *37*, 615–638. doi:10.1177/0309132512465919

Parr, H., & Stevenson, O. (2013). *Missing people, missing voices. Stories of missing experience*. Glasgow: The University of Glasgow.

Patterson, G. T. (2007). Examining missing person police reports to identify the service needs of runaway youth and their families. *Journal of Human Behavior in the Social Environment*, *16*(3), 73–88. doi:10.1300/10911350802107751

Payne, M. (1995). Understanding 'going missing': Issues for social work and social services. *The British Journal of Social Work*, *25*(3), 333–348. doi:10.1093/oxfordjournals.bjsw.a056183

Perkins, D., Roberts, P., & Feeney, G. (2011). *The UK missing person behaviour study*. Northumberland: Centre for Search Research.

Rodgers, B. L. (2000). Concept analysis. An evolutionary view, chapter 6. In B. L. Rodgers & K. A. Knafl (Eds.), *Concept development in nursing: Foundation techniques, and applications* (2nd ed., pp. 77–102). Philadelphia, PA: W.B. Saunders Company.

Roth, H. W. (1962). A review of the presumption of death in New York. *Albany Law Review*, *26*, 231.

Rowe, M. A., & Glover, J. C. (2001). Antecedents, descriptions and consequences of wandering in cognitively-impaired adults and the safe return (SR) program. *American Journal of Alzheimer's Disease and Other Dementias*, *16*(6), 344–352. doi:10.1177/153331750101600610

Rowe, M. A., Vandeveer, S. S., Greenblum, C. A., List, C. N., Fernandez, R. M., Mixson, N. E., & Ahn, H. C. (2011). Persons with dementia missing in the community: Is it wandering or something unique? *BMC Geriatrics*, *11*(28). doi:10.1186/1471-2318-11-28

Royal Canadian Mounted Police. (2015). *Missing persons unit*. Retrieved from http://www.rcmp-grc.gc. ca/ab/community-communaute/mis-dis/index-eng.htm

Ruffell, A. (2005). Searching for the IRA 'disappeared': Ground-penetrating radar investigation of a churchyard burial site, Northern Ireland. *Journal of Forensic Sciences*, *50*(6), 1430–1435. doi:10. 1520/JFS2004156

Samways, M. (2006). *To study missing persons cases with a focus on risk assessment models, investigation methods, missing persons procedures, and communication between law enforcement agencies and non-government organisations*. Canberra: The Winston Churchill Memorial Trust.

Schmidt, J. S., & Fulton, P. R. (1982). Using dentistry and computers to identify missing persons and unidentified dead. *The Journal of the Michigan Dental Association*, *64*(6), 251–252.

Shalev Greene, K., & Hayden, C. (2014). *Repeat reports to the police of missing people: Locations and characteristics*. Portsmouth: University of Portsmouth.

Shalev Greene, K., & Pakes, F. (2014). The cost of missing person investigations: Implications for current debates. *Policing: A Journal of Policy and Practice*, *8*(1), 27. doi:10.1093/police/pat036

Shalev, K. (2011). Children who go missing repeatedly and their involvement in crime. *International Journal of Police Science and Management*, *13*(1), 29–36. doi:10.1350/ijps.2011.13.1.197

Shalev, K., Schaefer, M., & Morgan, A. (2009). Investigating missing person cases: How can we learn where they go or how far they travel? *International Journal of Police Science and Management*, *11* (2), 123–129. doi:10.1350/ijps.2009.11.2.116

Shcherbakov, V. V. (2001). The most important aspects of identification of the missing people in Bosnia and Herzegovina. *Voenno-meditsinskii Zhurnal*, *322*(9), 15–18.

Siegel, R., Sperber, N. D., & Trieglaff, A. (1977). Identification through the computerization of dental records. *Journal of Forensic Sciences*, *22*(2), 434–442. doi:10.1520/JFS10606J

Simpson, A., & Bowers, L. (2004). Runaway success. *Nursing Standard*, *18*(19), 18–19.

Smith, R., & Shalev Greene, K. (2015). Recognizing risk: The attitudes of police supervisors to the risk assessment process in missing person investigations. *Policing*, *9*(4), 352–361.

Stevenson, O., Parr, H., Woolnough, P., & Fyfe, N. (2013). *Geographies of missing people: Processes, experiences, responses*. Glasgow: The University of Glasgow.

Stewart, D., & Bowers, L. (2011). Absconding and locking ward doors: Evidence from the literature. *Journal of Psychiatric and Mental Health Nursing*, *18*(1), 89–93. doi:10.1111/j.1365-2850.2010. 01622.x

Strom, F. (1968). The police register of missing persons and the assistance of forensic dentistry. *Den Norske Tannlaegeforenings Tidende*, *78*(2), 117–122.

Swanton, B., & Wilson, P. (1989). *Research brief: Missing persons, trends and issues in crime and criminal justice (No. 17)*. Canberra: Australian Institute of Criminology.

Tarling, R., & Burrows, J. (2004). The nature and outcome of going missing: The challenge of developing effective risk assessment procedures. *International Journal of Police Science and Management*, *6*(1), 16–26. doi:10.1350/ijps.6.1.16.34459

Taylor, J., Bradbury-Jones, C., Hunter, H., Sanford, K., Rahilly, T., & Ibrahim, N. (2014). Young people's experiences of going missing from care: A qualitative investigation using peer researchers. *Child Abuse Review*, *23*(6), 387–401. doi:10.1002/car.2297

Tofthagen, R., & Fagerstrøm, L. M. (2010). Rodgers' evolutionary concept analysis – a valid method for developing knowledge in nursing science. *Scandinavian Journal of Caring Sciences*, *24*, 21–31. doi:10.1111/j.1471-6712.2010.00845.x

Turner, C. H. (1975). Identification of missing persons from their dentitions. *British Dental Journal*, *138* (9), 327–328.

UK Missing Persons Bureau. (2017). *Missing persons: Data and analysis 2015/16*. London: National Crime Agency.

Walker, L. O., & Avant, K. C. (2005). *Strategies for theory construction in nursing*. Upper Saddle River, NY: Pearson Prentice Hall.

Wilkie, T., Penney, S. R., Fernane, S., & Simpson, A. I. (2014). Characteristics and motivations of absconders from forensic mental health services: A case-control study. *BMC Psychiatry*, *14*, 14–91. doi:10.1186/1471-244X-14-91

Wood, W. (1951). The police enquiry office. *Police Journal*, *24*, 149. doi:10.1177/0032258X5102400211

Yoder, K. A., Whitbeck, L. B., & Hoyt, D. R. (2001). Event history analysis of antecedents to running away from home and being on the street. *American Behavioral Scientist*, *45*(1), 51–65. doi:10.1177/00027640121957015

Young, P. A. (1977). Hand-held thermal imaging systems. *Proceedings of SPIE – The International Society for Optical Engineering*, *110*, 49–55. doi:10.1117/12.964596

Zerger, S., Strehlow, A. J., & Gundlapalli, A. V. (2008). Homeless young adults and behavioral health: An overview. *American Behavioral Scientist*, *51*(6), 824–841. doi:10.1177/0002764207311990

Zoglio, M. J. (1980). *Tracing missing persons: A professional's guide to techniques and resources*. Doylestown, PA: Tower Hill Press.