Experiences of vulnerability in adult male prisoners: an integrative review

Dr Vanessa Heaslip ^{ab*}, Caspian Dugdale ^c, Professor Jonathan Parker ^d, Professor Berit Johnsen ^e, Professor Sarah Hean ^b

^a Department of Nursing Science, Faculty of Health and Social Sciences, Bournemouth University, UK.

^b Department of Social Work, Stavanger University, Norway.

^c Academic Services, Bournemouth University, UK.

^d Department of Social Sciences and Social Work, Bournemouth University, UK.

^e University College of Norwegian Correctional Service, Norway

^f Footprints, UK.

*Corresponding Author: Dr Vanessa Heaslip Associate Professor, B414 Bournemouth House,
Department of Nursing Science, Christchurch Road, Bournemouth University, Bournemouth, UK.
Email vheaslip@bournemouth.ac.uk. Orcid 0000-0003-2037-4002

Keywords Criminal justice, offender, prisoner, prisons, vulnerability, social exclusion

Biographies

Vanessa Heaslip is an Associate Professor at Bournemouth University & Visiting Associate Professor at University of Stavanger. Her research interests are social exclusion, vulnerability and marginalised groups.

Caspian Dugdale is an academic liaison library at Bournemouth University. His career has focused on health disciplines at a number of UK universities.

Jonathan Parker is Professor of Society and Social Welfare at Bournemouth University, and a member of the doctoral education team at Università Cattolica del Sacro Cuore.

Berit Johnsen is Head of Research/ Research Professor in penology at the University College of Norwegian Correctional Service. Her research includes, preventive detention, quality of prison life, prison architecture and carceral geography.

Sarah Hean is a Professor of Social Work at the University of Stavanger with expertise in interprofessional education and collaborative practice between mental health and criminal justice systems.

Abstract

Vulnerability linked to offenders tends to focus on victims and society. Understanding prisoner vulnerability, is important to better address the negative impact of prison life. This paper reviews the evidence on vulnerability reported by male prisoners. 3038 citations were filtered using the Preferred Reporting Items for Systematic reviews and Meta-Analysis guidelines. Data were analysed using thematic analysis, highlighting four areas of vulnerability: uncertainty, environmental vulnerability, fear of harm and loss of human connection. The paper notes that basic principles for treatment of prisoners are not met in many areas, indicating a need to shift conceptualisations of vulnerability.

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Background

Vulnerability is a broad, contested concept that is contextually defined (Heaslip, Hean & Parker, 2016). It relates to an individual being susceptible to, having an increased chance of, having an openness to, lacking barriers against, being exposed to or without protection from, something unspecified (Purdy, 2004). Mackenzie, Rogers and Dodds (2014) argues our very existence as human beings is underpinned by vulnerability as it relates to physical needs and the frailty of the physical body exposed to illness, disability, and death. As social beings, we require human connectedness and consequently, we are susceptible to emotional and psychological vulnerability. As sociopolitical beings, we are vulnerable to exploitation, oppression, and human right violations and lastly exposure to our environment, both natural and human-made, can perpetuate vulnerability (Mackenzie, Rogers & Dodds, 2014). Different population groups are viewed as more, or less, vulnerable on some or all the above dimensions. Prisoners are one such population: it can be argued that offenders are made vulnerable through ill health, poor societal value, reduced human connection, and living in hostile environments.

Understanding the vulnerability of prisoners is essential for the management of prisons, prisoners, and prisoner rehabilitation. Although people enter prison with a range of pre-existing vulnerabilities, the prison environment may make these intolerable or create new ones (environmental and human connectiveness dimensions of vulnerability). If these vulnerabilities are not addressed, instead of acting as a deterrence for future criminal behaviour, prison may in fact lead to an increase in antisocial attitudes/behaviours, making the risk of reoffending even higher upon release (Chen & Shapiro, 2007).

Vulnerability, ill-defined as it is, is part of our humanity and as such represents the common basis for human rights (Turner, 2006). Vulnerability is associated with certain rights: the right to life,

to privacy, to family life and so on. We are all vulnerable and protecting dignity is central to countering this (Andorno, 2016). Furthermore, a human rights response is required removing focus from the individual towards the global through social justice measures (Hosani, 2019). This removes the sense of populist outrage at treating with dignity an individual who has committed a particular and heinous offence but instead applies a value-based understanding of humanity regardless of setting or individual character. The United Nations (UN) Declaration on Human Rights (UNDHR) (UN, 2009), follows this argument and includes guidance specifically on 'basic principles for treatment of prisoners' stressing the inherent dignity and value to which all human beings, including prisoners, are entitled (sociopolitical dimensions of vulnerability). It asserts prisoners' right to access healthcare (physical dimensions of vulnerability), education and opportunities for meaningful employment placing a focus on re-integration post-incarceration. In a similar vein, the UN's Educational Scientific and Cultural Organisation (UNESCO, 2018; online) argues that society has a responsibility to ensure -"...that the man in prison should not "become a thing" but should retain at least some of the conditions without which life becomes intolerable'. Indeed, Nelson Mandela famously quoted 'No one truly knows a nation until one has been inside its jails. A nation should not be judged by how it treats it highest citizen, but its lowest ones'.

Despite UNDHR, individual rights and dignity in criminal justice settings are often limited and the human biographies of those made vulnerable in these situations are ignored. The World Health Organisation (2014) reports internationally high levels of mental illness, infectious diseases (HIV, hepatitis, tuberculosis) and non-communicable disease in prison populations, for example, which suggest prisoners remain highly vulnerable, experiencing conditions that are not merely punishment, but humanely intolerable. This raises questions related to our understanding of what constitutes intolerable conditions and how these impact on prisoners, recidivism, and eventually public safety.

Current perceptions of prisoner vulnerability

In the criminal justice system (CJS) context, vulnerability is often considered in terms of risk of recidivism (Edwards, Albertson, & Verona, 2017) and identification of specifically vulnerable prison populations such as people with mental illness (Sodhi-Berry, Knuiman, Preen, & Alan, 2015), disability (Murphy et al., 2017) and women (Ministry of Justice, 2018). In reviews of the effectiveness of rehabilitation models such as the Responsivity-Needs-Risk (RNR) (Andrewes & Bonta, 2006), there is a tendency to focus on an 'etic' perspective: an external evaluation of what increases the risk of reoffending and the needs in the individual prisoner that require amelioration. This etic approach focuses upon groups of people and identifies their vulnerability based on external objectivized criteria

(Spiers, 2000). Suicide rates (Fazel, Ramesh, & Hawton, 2017), incidences of psychotic illness and depression (Fazel & Seewald, 2012) are examples. However, such studies neglect the prisoners' experiences. In contrast, an 'emic' approach, a state of being threatened and a feeling of fear of harm (Spiers, 2000), focuses on prisoners' experiences of their own vulnerability. This perspective is internally judged, identified by the individual experiencing feeling vulnerable. The perspective is more in line with the strengths-focused Good Life Model of rehabilitation (Ward & Maruna, 2007). This stance suggests prisoners have the same aspirations as non-offenders and that offenders seek similar well-being/human good.

The predominant perspective of vulnerability is the etic perspective, a fact resulting from the power of the 'expert' professional voice versus the contrasting 'silenced' voice of the individual service user (Parker, Heaslip, & Ashencaen Crabtree, 2020). Heaslip, Hean and Parker (2016) argued elsewhere for a fusion of the emic and etic, a so-called 'etemic' or fused perspective combining the advantages of both perspectives which acknowledges the individual's voice (the prisoner) alongside the professional discourse (e.g. prison officer or psychologist). This combines normative external perspectives on vulnerability with internal lived experiences, a 'yin-yang', fusing both reductionist and humanistic perspectives into a new, etemic approach. To achieve this, however, a greater understanding of the emic perspective, and a review of the evidence supporting this, is first required. To our knowledge there is no such review of the emic perspective. The concept of vulnerability, and how this is experienced by prisoners themselves, is useful to determine what prisoners find tolerable or intolerable. Such understanding will alert prison authorities to the conditions that expose prisoners to unacceptable levels of distress that may have longer-term implications for their rehabilitation or recidivism. This review will critically evaluate current literature on the vulnerability of adult male prisoners. Male prisoners were chosen as the review's focus as they constitute more than 93% of the global prison population (Institute for Criminal Policy Research, 2017). The review question was 'What are the experiences of vulnerability of adult male prisoners?'

Methods

A five step integrative review methodology was chosen as it enabled the inclusion of both qualitative and quantitative studies needed for a comprehensive understanding of the phenomenon of interest (Whittemore & Knafl, 2005) (see Figure 1). The review also follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2009 Checklist. The review was conducted by a multi-disciplinary team which included expertise in vulnerability (Heaslip and Parker), criminal justice (Hean, Johnsen and Stevens) as well as undertaking systematic searching (Dugdale). Stage one

of the review process has been presented in the background and review question sections of this paper.

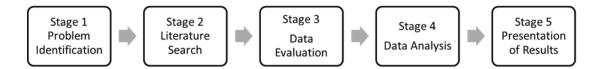


Figure 1 Integrative Review Process (Whittemore and Knafl, 2005)

Search strategy

We conducted a systematic search of the literature (Stage 2), using the PRISMA flow diagram (Figure 2) to document the selection of studies for review. In June 2018 and April 2021, nine databases were searched including: Cochrane library (Cochrane systematic reviews) (0), PROSPERO (273), Campbell Collaboration (systematic reviews) (0), PsycInfo (1505), Academic Search Ultimate (976), SOCIndex (543), ERIC (119), Web of Science (all data sets) (870) and Scopus (144). A list of search terms was developed using keywords and database specific subject headings (see Table 1). A forward citation search and search of references was also undertaken for papers included in the review.

Table 1 Web of Science Search Terms

((TS=(inmate* OR prisoner* OR offender* OR detainee* OR felon OR felons) AND TS=("self-aware*" OR self-concept OR "self concept" OR narrat* OR biograph* OR autobiograph*)) OR (TS = ((inmate* OR prisoner* OR offender* OR detainee* OR felon OR felons) NEAR/3 (perceive* OR perception* OR experienc* OR feel*)))) AND (TS=(vulnerab* OR weak* OR resilian* OR "self-esteem" OR "self esteem" OR "coping-abilit*" OR coping NEAR/2 abilit* OR cope NEAR/2 abilit* OR masculin* OR macho OR machismo OR capabilit* OR "self-belief*" OR self NEAR/2 belie* OR oneself NEAR/2 belie* OR risk* OR "self-stigma" OR self NEAR/2 stigma OR oneself NEAR/2 stigma* OR psychological* NEAR/2 adapt* OR emotion* NEAR/2 adjust*))

Results were exported, managed, and shared using EndNote bibliographic referencing software. The papers retrieved from the initial search were reviewed twice applying the inclusion and exclusion (Table 2). The first sift of unique records, at title and abstract level, was conducted by VH and were filed as 'include' or 'exclude'. Records filed to 'exclude' were randomised and 10% were each reviewed by JP and CD to confirm the selection process. The full text of the remaining articles was then reviewed again by VH to identify final studies for inclusion in the review. Again, records filed to 'exclude' were also randomised and 10% were each reviewed by JP, CD and SH to ensure credibility of the review process.

Table 2 Inclusion and Exclusion Criteria

Inclusion

- Research Papers including reviews and secondary data analysis
- Papers written in English
- Adults (18+), current prisoners/ exprisoners reflecting upon or lived experiences in prison
- Male Gender including female to male Trans
- Held on remand in prison, awaiting trial in prison,

Exclusion

- Discussion papers, conference papers
- Papers not written in English or published before 2009
- Youth offenders, probation or serving non-custodial sentences, police cell custody, detained illegal immigrants, prisoners on death row, health programmes, forensic mental health, end of life care, Covid
- Female prisoners, Male to female trans
- Prison staff perceptions of prisoners
- Vulnerability to offend/re-offend, other aspects of the criminal justice system and not prison, transition between prison and community,

Data Extraction and Evaluation

Studies that remained after the above review process were read in detail and relevant information extracted into an extraction table. This included fields pertaining to author, year, country in which study conducted, aim, methods, findings pertaining to perspectives on vulnerability, study limitations and critical appraisal score (Table 3).

Critical appraisal

Each study was critically appraised for methodological quality [VH], using the Mixed Methods Appraisal Tool ((MMAT) (Hong et al., 2018). MMAT was chosen as it specifically enables a consistent approach to the assessment of different methodological studies including qualitative, quantitative, and mixed methods. Ten percent of the sample were independently reviewed by BJ. The quality assessments were compared, and any disagreements were resolved through discussion. Based upon the review of quality, each study received an overall rating of strong, moderate or weak; a rating of strong was afforded to papers which met 6 or more of the criteria whilst papers were designated as weak if only 1 or 2 of the criteria was met (Table 3). The appraisal was conducted to comment on the quality of research in the field and no study was rejected based on methodological rigour (Sandelowski BarrosoJ., & Voils 2007).

Data Analysis

Data extracted from the papers were analysed using Braun and Clarke's (2006) process of thematic analysis. This included, identifying patterns and codes across the different papers included

in the review leading to the identification of themes [VH], which were shared with other members of the research team [SH, JP, BJ, CD] thus ensuring confirmability of the analysis process.

Results

Using the search strategy described above, 3038 titles and abstracts were reviewed by VH for relevance (Figure 2). At this screening stage 2901 papers were excluded because the articles did not meet the inclusion criteria, were duplicates or not relevant to the focus of the review. 10% of the rejected papers were reviewed [JP, CD] as part of the review's quality assurance process, where there were differences in opinion these were resolved through discussion. One hundred and thirty-seven full text papers were obtained for review and at this stage a further 116 were excluded from the review as they did not meet the review protocol criteria. Again, 10% of the rejected papers were reviewed [JP, CD, SH] as part of the review's quality assurance process. This resulted in 21 studies being included in the review (Figure 2).

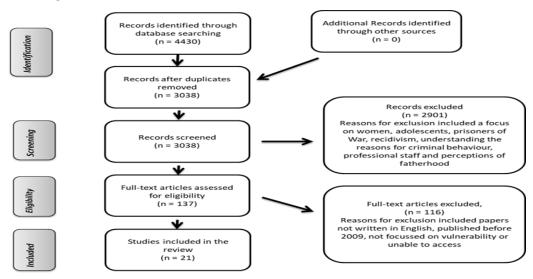


Figure 2 Summary of Review process (PRISMA)

Study characteristics

Most studies included in the review were qualitative (15) followed by quantitative (3), secondary data analysis (2) and mixed methods (1). These studies were predominately carried out in the USA (7), Canada (4), UK (2) with the rest of the studies (1 in each country) in Australia, Israel, India, Norway, Sweden, France, Jamaica, and Nigeria. Critical appraisal showed the majority of the studies were of methodologically either moderate (14) or strong (4) whilst three studies were identified as being weak with a tendency to not discuss in depth the analytical process (Table 3).

Table 3 Studies included in the review

Author, Year, Country	Aim	Methodology (sample, methods, analysis)	Findings	Quality Appraisal score
Andrinopoulos et al. 2011 USA	Explore stigma, homophobia, and HIV in a Jamaican prison context	Qualitative: two semi- structured interviews (n=25) participants. Content analysis	Key findings included stigma related to HIV status and sexuality which led to homophobia within the prison	MMAT moderate
Baidawi and Trotter 2016 Australia	Investigate relationship between psychological distress among older prisoners, their health and health care utilisation	Mixed methods: face to face questionnaire over 8 sites in two states. Experimental group (n=173) prisoners aged >50 and control group (n=60) prisoners aged <50. Kessler Psychological Distress (K10) scale and Barthel Index. SPSS analysis	Experimental group had significantly lower K10 scores than younger prisoners (p=0.036). Older prisoners had a significantly greater number of health issues (p<0.001). Older prisoners with a Barthel Index of <100 had significantly higher K10 scores (p<0.001). Small but significant positive correlation between older prisoner's health care utilisation and total K10 scores (Pearson correlation =0.21, p<0.01). Those who reported issues accessing health care had significantly higher K10 scores (p<0.001)	MMAT moderate
Crewe et al. 2014 UK	Describe dominant emotional climate of a medium security prisons	Qualitative: interviews and observations. Participant numbers, recruitment strategy and analysis not specified	Two main themes 1) Emotional geography of prison life and 2) Emotional Zones. Differential behaviours and experiencers of prisoners in different locations highlighted need for more detailed analysis of prison culture focussing upon the social architecture of different prison spaces	MMAT weak
Einat 2009 Israel	Identification of prison rape slang, analysis of	Qualitative: 250 inmates from 7 different prisons.	Cultural and religious beliefs reduce the amount of forced same sex behaviour in Israel which is in contrast with westernised	MMAT moderate

	inmates' world views,	Phenomenological semi-	prisons. Here inmates who force other inmates into forced	
	beliefs, and attitudes	structured interview with	sexual behaviour are socially isolated, stigmatised and	
	regarding it	content and thematic	humiliated by other prisoners.	
		analysis.		
Guin 2009 India	To explore the	Qualitative: 10 prisoners	Three themes 1) Diagnosis of HIV/AIDS, 2) Access to health care	MMAT
	HIV/AIDS health care	across 3 prisons in 3 districts	services by HIV positive inmates, 3) Health education	weak
	services provided by a	of India. Semi-structured	programme. No mandatory testing and participants identified	
	corrections facility in	interviews, thematic	that whilst basic health care services were available it was	
	India.	analysis.	difficult to access. In addition, no preventable measures	
			implemented to prevent HIV/AIDS	
Haualand 2015	How disabled	Qualitative: 8 prisoners.	Two themes 1) Experiences of disables prisoners, 2)	MMAT
Norway	prisoners experience	Semi-structured interviews.	Accessibility, accommodation, and communication. This paper	moderate
	access (or lack of) to	Process of analysis not	identified that prisoners with a disability struggled to access	
	activities and services	specified	rehabilitation.	
	in prisons			
Krienert et al.	To examine inmates;	Secondary data analysis:	67% (n=248) men identified consensual relationships in prison.	MMAT
2014	attempts at 'safe sex'	data from the National	Concerns regarding STIs including HIV were identified, yet there	moderate
USA	in a sexually	Institute of Justice study	were very few options to practice safe sex.	
	oppressive nom-	(n=564). Data thematically		
	permissive	re-coded to examine inmate		
	environment	voice on sexual practice.		
Lindbom et al.	Former inmates' views	Qualitative: semi-structured	Three themes, 1) Queuing for the norm, 2) Sex according to the	MMAT
2017 Sweden	on situations they	face to face interviews (n=8).	norm, 3) Needing a HIV protection strategy	strong
	believed to be	Content analysis	Participants experienced risk taking behaviour such as sharing	
	associated with risk of		needles and unprotected sexual activities.	
	HIV transmission			
Listwan et al.	Explore whether	Quantitative: 1642 recently	98% of respondent had experienced at least one of the eight	MMAT
2014 USA	features of the prison	released offenders. Face to	types of victimisation, most commonly experiencing 3 (n=424)	moderate
	environment or	face survey as well as the	or 4 (n=419) types. Both perceptions of prison environment and	
	individual		perceptions of correctional officers were significant. Being	

	characteristics predict	Social Support Scale (SSQ6).	white and older was inked to reduced experiences of	
	who is most likely to	2 stage analytical process.	victimisation whilst having a diagnosed metal illness or	
	experience		attending religious services was associated with increased	
	victimisation		victimisation.	
Maier and	Understand what	Qualitative: retrospective	Three themes 1) Experiences of prisoner threats, 2) Experience	MMAT
Ricciardelli 2019	safety means for	semi-structured interviews	of administrative uncertainties, 3) Managing prisoners' threats	moderate
Canada	incarcerated men and	(n=56) parolees across 11	and administrative uncertainties	
	how they seek to	prisons in Canada. Thematic	Participants' felt at risk of physical violence and institutional	
	create safety	analysis	reprimand and punishment.	
Murray 2020 UK	Young men's	Qualitative: ethnographic	Time is prison is perceived as something given rather than	MMAT
	gendered discourses	Study, semi-structured	taken away and those who struggled perceive as 'heavy	moderate
	on time in prison and	interviews (n=26 men and 6	whackers' who were often subjects of jokes and bullying.	
	how this shapes their	prison staff)	Bullying was a method of group socialisation. Length of time in	
	experience		prison was seen as a mark of respect	
O'Neill Shermer	How inmate	Secondary analysis:	Being a male, violent offender with a mental health issue	MMAT
and Sudo 2017	awareness develops	quantitative database of	significantly increased the likelihood of fear of rape.	moderate
USA	and contributes to	qualitative data (n=564).	Heterosexual inmates were significantly less fearful of rape than	
	their fear of prison	Bivariate and logistic	their homosexual/bisexual counterparts. Inmates hearing	
	rape	regression analysis	prisoner officers talk of rape also increased their fear,	
			conversely inmates who felt officers were trying to prevent	
			rape were less fearful.	
Orjiakor et al.	Lived experience of	Qualitative:	Three themes 1)Traumatized by imprisonment, 2) Living in	MMAT
2017 Nigeria	awaiting trail prisoners	phenomenological study	limbo – experienced as ATPs in prolonged stay, 3) Coping –	strong
	(ATPs) detained in a	(n=8). Focus groups and	looking forward in hope	
	sub-Saharan country	individual interviews.		
		Thematic analysis		
Pérez et al. 2010	Factors related to	Quantitative: survey (n=247)	32% of participants reported experiencing victimisation in the	MMAT
USA	inmate victimisation	prisoners across 6 prisons.	past year. Inmate characteristics (sex, race and paid job) and	
	by staff and other		institutional variables (maximum security and perceptions of	

	inmates, explore whether individual and institutional characteristics related to victimisation varied by perpetrator	Bivariate and logistic regression analysis	institutional safety) were significantly related to staff inmate victimisation, especially for male inmates ($p \le 0.01$), non -white inmates ($p \le 0.01$) and those housed in maximum security ($p \le 0.001$). Inmates with a job were less likely to be victimised by staff ($p = \le 0.01$). In terms of inmate to inmate victimisation (II) inmate characteristic (time at faculty) and institutional (maximum security, perceptions of institutional safety), in that increased time was significantly associated with victimisation ($p = \le 0.01$), being in high security ($p = \le 0.05$), where victimisation decreased as perceptions of institutional security increased ($p \le 0.01$)	
Ratkalar and Atkin-Plunk, 2020. USA	To what extent is sexual orientation and history of childhood sexual abuse (CSA) associated with perceptions that rape is a threat in prison?	Secondary analysis: quantitative database of semi structured interviews (n=409). Bivariate and logistic regression analysis	21.3% (n=80) of incarcerated men believe that rape is a big threat in prison. Incarcerated men (gay/bisexual) are over twice as likely to perceive rape as a big threat in prison compared with heterosexual inmates. Inmates who have been in prison for two to five years are nearly three times more likely to perceive rape is a big threat compared with those who had been in prison for less than two years	MMAT Moderate
Ricciardelli and Spencer 2014 Canada	How sex offenders attempt to pass among the general prison population, methods in which their convictions become known	Qualitative: 59 released prisoners, semi-structured interviews. Grounded theoretical approach to thematic analysis	Three themes 1)Exposing conditions of precarity: gender, violence, and sex offenders, 2)Performing the masculine: the sex offender's quest to pass, 3) Methods of exposure	MMAT
Ricciardelli and Moir 2013 Canada	To investigate the stigma beyond that of being a criminal carried by sex	Qualitative: research (n=56) men released on parole. 56 semi structured interviews with men on parole.	Six themes 1)Prison hierarchy and stigma, 2) Stigmatised by the stigmatised: social exclusion among prisoners,) Courtesy stigma, 4) Physical abuse and stigma within the prison environment, 5) Stigmatized by institutional segregation and	MMAT strong

	offenders from the perspective of incarcerated prisoners in Canada	Grounded theoretical approach to thematic analysis	structures intended to provide help, 6) Systemic stigma: stigmatised institutions	
Tewksbury 2012 USA	Explore ways in which incarcerated sex offenders experience social stigmatization	Qualitative: 24 sex offenders using semi structured interviews. Exploratory open coding analysis	Three themes 1) Stigmatization in the prison community, 2) The experience of being stigmatized, 3) Internalised consequences of sex offender stigmatisation, externalised consequences of sex offender stigmatisation	MMAT moderate
Van der Meulen 2017 Canada	To learn from former prisoner experiences and insights on inprison drug use	Qualitative: retrospective study (n=30) former prisoners via focus group or one to one interview. Thematic analysis	Four themes 1) Drug availability, 2) Injection drug use equipment, 3) Frequency of injection drug use, 4) Sharing and disposal of equipment	MMAT strong
Wolff and Shi 2009 USA	Explore the variation in feelings of safety across particular types of common harmful situations inside prison	Quantitative: survey (n=7221) prisoners across 13 prisons. Tools used included adapted National Violence against men and women survey and Prison socialism climate survey	Majority of participants reported they had not experienced physical or sexual victimisation in last 6 months (n=3099) or any sexual/physical assault during their incarceration (n=4160). Male inmates who felt least safe were the ones who have experienced victimisation	MMAT moderate
Yang et al. 2009 France	Retrospective review of subjective impact of imprisonment with prisoners who had been incarcerated for 10 years and longer	Qualitative: Semi-structured interview and diagnostic interviews using with 59 participants. Thematic analysis and ALCESTE software	Seven themes 1) The outside world, 2) Others, 3) Punishment, 4) Time, 5) Affects and impulses, 6) Self-concept, 7) Speech Structural effects of long-term incarceration strongly determine the psychological state of inmates	MMAT weak

The analysis identified four themes pertaining to the emic experiences of vulnerability of adult male prisoners. These were themes of uncertainty, environmental vulnerability, fear of harm, and loss of human connection.

Theme 1 Uncertainty

One of the areas affecting offenders' feelings of vulnerability was a feeling of uncertainty and this linked to uncertainty of release dates (Orjiakor et al., 2017; Maier & Ricciardelli, 2019). Maier and Ricciardelli (2019) describe, especially, how the volatile nature of the prison environment made the chances of parole eligibility particularly uncertain. They describe for example, how fellow offenders target those prisoners coming up for parole in physical or verbal confrontations that compromise the prisoners' chances of being paroled. Uncertainty also manifests in terms of how prisoners perceive their lives will be after release from prison (Yang, Kadouri, & Révah-Lévy, 2009; Tewksbury, 2012). Tewksbury (2012) and Orjiakor et al. (2017) identified the impact of stigma of imprisonment and the associated shame that the label of offender has post release leading to uncertainly with rebuilding one's life after prison. This is most prevalent for those in prison for sexual offences who find that life after prison is associated with formal legal restrictions resulting in reduced opportunities to establish a meaningful existence prison (Tewksbury, 2012).

Theme 2 Environmental vulnerability

Prisons were identified as a risky environment in which to live (Maier & Ricciardelli, 2019). The environment emphasised the low status of the inmates (Crewe, Warr, & Bennett, 2014) and did not protect the prisoners from harm (Shermer & Sudo, 2017). Environmental vulnerability consisted of two main components, physical and cultural environment of the prison setting.

• Physical environment

The provision and access to healthcare was relevant here. Three papers included in the review (Guin, 2009; Haualand, 2015; Baidawi & Trotter, 2016) noted challenges for prisoners regarding health and accessing healthcare. Guin's (2009) study explored HIV/Aids health care services in India and identified that prisoners felt the healthcare facilities did not meet their HIV needs sufficiently. Furthermore, Haualand (2015) who explored disabled prisoners experiences in Norway identified that prisoners expressed an 'all or nothing' approach to dispensing of medication and a lack of access to healthcare to prevent further functional decline for prisoners with disability. Lastly, Baidawi and Trotter (2016) noted that the physical environment was difficult for older prisoners with ongoing health issues.

Concern regarding HIV was identified in a further four papers (Einat, 2009; Guin, 2009, Krienert, Walsh, & Lech 2014; Lindbom, Larsson, & Agardh, 2017), even though there was no mandatory testing for HIV (Guin, 2009). Fears of contracting HIV typically related to two main issues: sex with fellow inmates and drug use. Krienert, Walsh and Lech (2014) study with 564 male and female prisoners identified that 67% (n=248) men identified that consensual, intimate relationship occurred between prisoners inside prison. Despite this, there was a lack of provision of condoms (Einat, 2009) to promote safe sex leading prisoners to resort to having unprotected sex (Lindbom et al., 2017), using 'homemade' barrier methods such as gloves and bread wrappings (Krienert et al., 2014) or risky methods sexual practices such as withdrawal and chemical cleansing using bleach (Krienert et al., 2014).

Intravenous drug use within prison, whilst against prison rules, was identified as common place. However, access to sterile needles was more challenging (van der Meulen, 2019). Prisoners responded to this by sharing needles (Lindbom et al., 2017; van der Meulen, 2019), making homemade syringes and stealing from the syringe disposal boxes from the healthcare facilities (van der Meulen, 2019), all of which increased the risk of infection not only HIV but also hepatitis:

"I did not need to keep track of when drugs entered the department. I knew since I had a long queue outside my cell when people wanted to borrow the needle." (Lindbom et al., 2017, p. 6)

• Cultural environment

The cultural environment of prisons was identified as oppressive (Orjiakor et al., 2017), linked to the masculine culture of coiled but managed aggression (Crewe et al., 2014), violence and dominance (Murray 2020). This led to fear of fellow inmates (explored in next theme, fear of harm). Not only was there fear of other inmates but both Ricciardelli and Spencer (2014) and Orjiakor et al., (2017) noted that prison officers contributed to this oppressive environment through their power over prisoners (Ricciardelli & Spencer, 2014). Some were cold and distant with little concern about the prisoners and their welfare (Orjiakor et al., 2017). It was evident from the review that between the prisoners there were also expected behavioural codes and breaching these led to some offenders experiencing more difficulties within this cultural environment. These prisoners included those who were HIV positive (Andrinopoulos, Figueroa, & Kerrigan 2011) or gay (Lindbom et al., 2017), both groups impacted by the stigma of infection and contracting HIV. The other group who experienced increased stigmatisation within prisons were sex offenders (Einat, 2009; Tewksbury 2012; Ricciardelli and Moir, 2013; Ricciardelli & Spencer 2014). Sex offenders have the lowest status of all prisoners

(Einat, 2009; Tewksbury,2012; Ricciardelli & Moir, 2013), eliciting feelings of disgust in their fellow prisoners (Ricciardelli & Spencer, 2014):

"I'm not a citizen, I'm a sex offender" (Tewksbury 2012, p. 612).

Their low status as sex offenders made them feel isolated and excluded (Tewksbury, 2012; Ricciardelli & Moir, 2013) and many hid the nature of their crime living in daily fear of being exposed (Ricciardelli & Spencer, 2014).

Theme 3 The Fear of Harm

Twelve of the twenty-one papers included in the review discussed fear of harm within the prison setting, rather than a report of the actual harm itself (Einat, 2009; Yang Kadouri, & Révah-Lévy, 2009; Wolff & Shi, 2009; Pérez, Gover, & Tennyson 2010; Andrinopoulos et al., 2011; Tewksbury, 2012; Ricciardelli & Moir, 2013; Listwan, Daigle, & Hartman, 2014; Ricciardelli & Spencer, 2014; Shermer & Sudo, 2017; Maier & Ricciardelli, 2019, Ratkalkar & Atkin-Plunk 2020). Multiple terms were used to describe the prisoners' fear of harm including intimidation (Maier & Ricciardelli, 2019), victimisation (Pérez et al., 2010; Ricciardelli & Spencer 2014; Maier & Ricciardelli, 2019) and harassment (Tewksbury, 2012). This was perpetrated by both fellow inmates and prison staff (Yang et al., 2009; Wolff & Shi, 2009; Pérez et al., 2010; Tewksbury, 2012; Ricciardelli & Spencer, 2014). The prison environment and staff influenced the degree of victimization occurring (Listwan et al., 2014). The fear of harm fell within three domains; physical harm (Yang et al., 2009; Wolff & Shi, 2009; Andrinopoulos et al., 2011; Ricciardelli & Moir, 2013; and Maier & Ricciardelli 2019); sexual harm (Wolff & Shi, 2009; Einat, 2009; Shermer & Sudo, 2017; Ratkalkar & Atkin-Plunk 2020) and psychological harm (Tewksbury, 2012; Ricciardelli & Moir, 2013).

Physical Harm

Wolff and Shi's (2009) study with 6,964 male inmates from 13 prisons in one state of the USA identified that 2,2023 prisoners had experienced physical assault by staff whilst 1,711 prisoners experienced physical assault by another prisoner during their time in prison. More recently, Listwan, Daigle, and Hartman (2014) study with 1,642 prisoners identified that 28.8% (n=458) had experienced fighting whilst 91.9% (n=1472) had reported witnessing and being scared by this. Research by Murray (2020) noted that bullying of other prisoners was common as part of group socialisation and the victims were typically the more vulnerable offenders.

Papers included in the review reported studies conducted in a range of different prisons (low to high security) but it was in the high security prisons that the most significant aspects of fear of

physical harm (such as stabbing) were identified which resulted in the inmates responding by becoming equally prepared to perpetuate violence themselves;

"The first day I got there they [other prisoners] approached me and told me I was too big and they'd have to stab me from behind...[So I] sharpened up my shank and I want to the shower with my shank. Went to the shower, washroom, gym, yard, ate with my shank.... I was always having to have my back to the wall, always watched my surroundings...it was stressful, things were different; dangerous or whatever. Stabbings every day, a lot of people get killed" (Maier & Ricciardelli, 2019, p. 237)

Sexual harm

A fear of sexual violence and rape was very prevalent in prisoners' accounts (Wolff & Shi, 2009; Shermer & Sudo, 2017; Ratkalkar & Atkin-Plunk 2020) but here there were cultural variations: Einat (2009) study in Israel, for example, noted that same sex rape and a fear of this was less frequent due to cultural beliefs regarding homosexuality. Prisoners who had already experienced sexual victimisation (Wolff & Shi, 2009; Ratkalkar &Atkin-Plunk 2020), prisoners receiving mental health treatment (Shermer & Sudo, 2017) and homosexual prisoners (Shermer & Sudo, 2017; Ratkalkar & Atkin-Plunk 2020) were most vulnerable in this regard. Ratkalkar and Atkin-Plunk (2020) also identified that fear of rape was more prevalent in prisoners serving two- five year sentences than those serving under 2 years.

Psychological harm

Fear of externally imposed psychological harm, including fear of emotional victimisation (Ricciardelli & Moir, 2013) and verbal abuse (Tewksbury, 2012). Listwan et al. (2014) noted that of all the different types of victimisation that occurred, psychological abuse occurred only with 39.6% (n=623) of prisoners, a further 94.9% (n=1,501) prisoners witnessing and being traumatised by it. Longer stays in prison were associated with an increased likelihood of victimisation (Pérez et al., 2010) with prisoners with mental illness (Listwan et al., 2014), non-white prisoners (Pérez et al., 2010), sex offenders (Ricciardelli & Moir, 2013; Ricciardelli & Spencer, 2014) and high security prisoners (Pérez et al., 2010) being the most vulnerable. Greater levels of education were associated with fewer experiences of victimisation (Pérez et al., 2010).

There was another form of psychological harm and this related to internal psychological distress caused by being in prison. This psychological distress (Yang et al., 2009) was linked to a plethora of reasons including trauma of incarceration (Orjiakor et al., 2017), an internalised sense of shame (Tewksbury, 2012), lack of control (Maier & Ricciardelli, 2019), feeling hopeless (Tewksbury,

2012, Orjiakor et al., 2017), powerlessness (Orjiakor et al., 2017) and feeling threatened (Maier & Ricciardelli, 2019).

"...an entire life in prison, that has no meaning. This situation leads nowhere because it has no meaning at all. It's not easy to handle" (Yang et al., 2009, p.299)

Crewe, Warr, and Bennett (2004) noted that prisoners, rather than dealing with this psychological distress, tended to respond by shutting off their emotions, which could long-term perpetuate their psychological vulnerability and distress:

"I put a mask on, to hide the pain, so I try to have a laugh to bury that pain, and when I'm back in my cell I take that mask off and the pain is there again" (Crewe et al., 2014, p.64)

Baidawi and Trotter (2016) study with 173 older prisoners (aged 50+) identified that older people with health issues also experienced more distress and Ricciardelli and Moir (2013) identified that being identified as a sex offender was also associated with increased anxiety and stress. There was also a recognition of mental illness of prisoners within three of the papers in the review, which manifested as depression and hopelessness (Tewksbury, 2012), anxiety (Orjiakor et al., 2017) and self-harm (Yang et al., 2009). Indeed, there was a recognition that being in prison was contributing to prisoner's mental illness (Yang et al., 2009) due to the pressure from worrying (Orjiakor et al., 2017) as well as increased anxiety through seeing other prisoners break down (Orjiakor et al., 2017). This for some prisoners led to suicidal thoughts:

"...Suicide, I've thought about it a lot, but I don't have the courage to kill myself" (Yang et al., 2009, p.299)

Theme 4 Loss of Human Connection

Issues related to loss of human connection whilst being in prison was raised by five of the 19 papers included in the review (Yang et al., 2009; Tewksbury, 2012; Crewe et al., 2014; Haualand 2015; Orjiakor et al., 2017). This loss of human connection centred on both physical connections with family (Yang et al., 2009) and non-family members who matter (Orjiakor et al., 2017). It is during visiting times that prisoners were truly able to express how they felt, to show and receive love and affection:

"When my family come every other week that's when the only time I can show my true emotions, give my baby brother a kiss or give my dad and stepdad a hug, and talk about family life, where in here you don't give no one a hug, you don't show them kind of feelings to anyone." (Crewe et al., 2014, p.67)

As well as connecting with friends and family, prisoners enjoy these visits as these offer the chance to connect with wider society, their cultural roots (Orjiakor et al., 2017) and the outside world. Whilst these visits were identified as important in maintaining their relationships on the outside for when they were released, these could also reinforce for them their perceived separation from loved ones, the outside world (Orjiakor et al., 2017) and their lost opportunities in life (Yang et al., 2009). Crewe et al. (2014) identified that there were some aspects of human connection amongst prisoners which typically manifested during sporting activities. However, this comradeship was not possible for all prisoners. Prisoners living with a disability had reduced peer connection due to physical access issues or sensory difficulties (Haualand, 2015) and sex offenders were viewed as not being worthy of human interaction (Tewksbury, 2012). Some prisoners also deliberately chose to reduce interactions with other prisoners as a mechanism to protect themselves from harm (Ricciardelli & Moir, 2013; Ricciardelli & Spencer, 2014; Crewe et al., 2014, Maier & Ricciardelli, 2019).

Discussion

The current evidence of how adult male prisoners experienced prison suggests there are four main areas where they feel vulnerable, or in other words where they feel susceptible, exposed or without protection (Purdy, 2004). Prisoners worry about their future, having to deal with the uncertainty of when they are to be released and what will happen to them thereafter. At the same time, they are made vulnerable by their current prison setting: they fear physical, sexual, or psychological harm within the prisoner environment which in turn was influenced by both the physical prison environment itself and the cultures which thrive there. These vulnerabilities are perpetuated by a loss of human connection with fellow inmates and prison staff as well as loss of connection with families and their wider communities. All of this compounded in psychological vulnerability and increased mental distress.

Exploring the vulnerability of prisoners offers an alternate but complementary view of the needs of prisoners to that expressed in RNR related rehabilitation models. This dominant view of rehabilitation relates the needs of prisoners to the risk of the prisoner recommitting a crime. As such, it views prisoners needs as factors, that if addressed, will reduce these risks. Andrewes and Bonta (2006) in developing this model identified eight main risk factors and related needs of prisoners when addressing future reoffending rates. These risks pertain to a history of antisocial behaviour, antisocial personality patterns, antisocial cognitions and associates, lack of positive contact with family and friends, substance misuse, absence of engagement in leisure activity and poor performance in employment/education. Rehabilitation programmes may focus on addressing these risks and the

associated needs. The long-term goal is that removing these risk factors, prisoners will remain crime free on release. However, these concerns differ substantially from what prisoners, adult male prisoners specifically, may currently be concerned about. Prisoners' perceptions of their own needs in terms of what makes them vulnerable, focuses on the here and now in the prison setting. Coping with these immediate vulnerabilities is likely to supersede thoughts of what may make them vulnerable or susceptible to reoffending in the future. They do feel uncertain about life on the outside where education, employment and social networks will be challenging for them but they are also faced with the uncertainties of when and if they will be released. In the shorter term, the physical, psychological, and sexual harms they currently face alongside struggling to cope with the social disconnection of prison life right now perpetuates their psychological vulnerability. Even the good life model of rehabilitation that focussed on more internal and bespoke motivations in the prisoner (Ward & Moruna, 2007), focuses mostly on the future and not their immediate vulnerabilities.

In synthesising the prisoners' emic experiences of vulnerability we see a contrast with the more etic views expressed in the RNR model of rehabilitation at least. Heaslip et al. (2016) suggest these etic and emic views be fused. Professionals working on rehabilitation efforts should take into account the uncertainties of offenders, feelings of isolation and their current fears of sexual, physical, and psychological harm. Greater inclusion of the prisoner as service user in service development is essential in developing the so called etemic perspective albeit this will not be without its challenges (Hean et al., 2021). Without addressing the vulnerabilities offenders feel in the here and now in prison, the less likely will it be that their engagement with rehabilitations and treatment programmes in the prison will be successful. If the internal motivation of the prisoner is key to the success of these, but lower order basic needs related to basic physiological and safety needs (See Maslow, 1954) are paramount, higher order needs related to self-actualisation, the focus of current etic rehabilitation models, are unlikely to drive prisoners' actions and behaviours.

Access to healthcare was also identified as problematic in this review yet prisoners have a right to healthcare which is equivalent to those received by the general population (Abbing, 2013). An estimated 3.8% of prisoners worldwide are living with HIV/AIDS, 15.1% with Hepatitis C and 4.8% with chronic Hepatitis B (4.8%) (Moazen, Owusu, & Wiessner 2019). This review noted that being in prison affected prisoners' health through difficulties in accessing healthcare and a lack of public health policies especially in promoting safe sex and needle exchange programmes. Data on drug use inside prison is scarce, as the use of drugs is prohibited within prisons. However, a World Health Organisation (WHO) report exploring drug use amongst prisoners across 17 European Union countries, identified that continued drug use in prison is a serious and international problem (WHO, 2014). Harm reduction

measures in prisons focus specifically on the reduction of harm caused by substance misuse but is a sensitive political issue despite being strongly supported by the 2020 Global State of Harm Reduction Report. The focus on the reduction of harm related to drug use includes transmission of HIV and other blood borne diseases, risk of overdose upon release, and the harm associated with lack of facilities/provision and overcrowded spaces (e.g. clandestine, improvised and/or unhygienic use of needles). Initiatives include needle exchange, drug consumption rooms, disinfectant, and methadone programmes. Politically implementing these measures is sensitive as it requires an admission that drugs are used in prison (Sander, Shirley-Beavan, & Stone 2009). Furthermore, fears by prison officers that needle exchange programmes would promote drug use and increase security concerns as needles can be used as weapons also have also stalled implementation (Danroth, 2018). But the harm that is possible in prison extends beyond that of drug use. The existing evidence on what makes prisoners feel vulnerable synthesised in the review showed the prisoners have a fear of physical, sexual, and psychological harm also. Prisoners are concerned, not necessarily with their use of drugs per se, but the transmission of diseases such as HIV through drug use but also sexual intercourse. Harm reduction efforts should therefore extend beyond minimizing the harm of drug use, but the harms caused by sexual, physical, and psychological violence also. It requires an admission that these are prevalent in the prison and require amelioration. But as with the provision of clean needles, the provision of condoms or counseling is a pragmatic approach to deal with the psychological, sexual, and physical harms of prison is politically sensitive and potentially seen as an admission of poor prison management.

The impact of prison on mental health of prisoners is well documented (Liebling & Moruna, 2005). However, this review identified that prisoners feel vulnerable because of their loss of human connection both with family/friends but also the outside world. Visits can be a bitter edge sword, however our review noted that visiting from friends and families enables prisoners to express emotions and feel connected. In the UK, prisoners are entitled to two one-hour visits every 4 weeks, and some prisons offer a 30 minute video call once a month equating to only two and a half hours with loved one every month (UK Gov, n.d.). The absence or control of internet and mobile phone access is likely to exacerbate this: under Section 40D(3A) Prison Act (1952) in the UK it is an offence to have a mobile phone without permission (Crown Prosecution Service, 2019) and it is mostly prohibited. In Norway, a prisoner is entitled to a minimum of one hour visit a week (The execution of Sentences Act [ESA] para. 31). Some prisons, both closed and open, may have visiting houses or apartments where prisoners may have visits from their families at the weekends. In closed prisons, a prisoner may have several phone calls per week, but altogether, they cannot extend beyond 20

minutes (ESA para. 32). Cell phones are also prohibited in closed and open prisons, but prisoners in halfway houses may have cell phones (Ibid.). The social disconnection that may result from these controls is of concern as it is known that adults who have social connections live longer and are healthier. Social support provides us with a feeling of being loved, cared for and listened to (Umberson & Montez, 2010). Furthermore, strengthening family attachments throughout the prison sentence has a sustained impact on reducing reoffending (Smith & McCarthy, 2017). The perils of social disconnection in prison supports the greater use of community based sentences, open prisons, and halfway houses for all but the most serious offenders. In the absence of family, prisoner officers have a central role in providing prisoners with the human connection they need, yet this review identified that prison officers often were cold and unfeeling towards prisoners.

Likewise, prisoner officers are ideally located to manage the uncertainty prisoners experience during their prison stay. However, prison officer training varies internationally and research is needed to better understand the minimum criterion of training, which includes understanding of prisoner vulnerability.

Strengths and limitations

Vulnerability of prisoners has mostly been associated with sub-groups linked to age, gender, sexuality, and disability. However, this review shows male adult prisoners to be vulnerable also. This is not because there is something specific about them, but because 'imprisonment' produces vulnerability and the prison setting perpetuates this. At the time of this review there are limited studies (n=21) exploring the emic dimensions of vulnerability of the prison population. Studies tend to be conducted in global north countries with little examination of the vulnerabilities of prisoners in mid and lower income countries and further research is needed here. However, we recognise that we only included published academic papers written in English and as such there may be other research not captured in this review.

Conclusion

The basic principles for treatment of prisoners (United Nations Declaration on Human Rights 2009) upholds the inherent dignity and value of all human beings, including prisoners. This review has highlighted that there are many areas in which these minimal rights are not met, in part due to a lack of focus on collecting and understanding the prisoner's emic perspective. Moving forwards, we argue for a shift to an etemic perspective which explores both the professional and the prisoner's experiences.

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References

Abbing, H. (2013), Prisoners right to healthcare, a European perspective, *European Journal of Health Law* 20(1); 5-19. doi: 10.1163/15718093-12341251

Andrinopoulos, K., Figueroa, JP., Kerrigan, D., Ellen, J. (2011), Homophobia, stigma and HIV in Jamaican prisons, *Culture, Health and Sexuality* 13(2); 187-2000

Andorno, R. (2016), Is vulnerability the foundation of human rights. In Masferer, A. and Sanchez, E.G. (eds) *Human Rights of the Vulnerable in the Age of Rights: Interdisciplinary approaches.* Switzerland: Springer, pp. 257-272.

Baidawi, S., and Trotter, C. (2016), Psychological distress among older prisoners: Associations with health, health care utilization and the prison environment, *Journal of Correctional Health Care*. 22(4); 354-366

Borkowska, A., Kreienkamp, J., Lau, B., Ming, A., Otubanjo, A., Wilson, H. (2019), *The UK Prison System:*Compliance with International Human Rights Law Workshop Report: https://www.ucl.ac.uk/global-governance/news/2019/mar/uk-prison-system-compliance-international-human-rights-law

Braun, V., and Clarke, V. (2006), Using thematic analysis in psychology, *Qualitative Research in Psychology*. 3; 77-101.

Butler, M. (2008), What are you looking at? British Journal of Criminology 48; 856-873

Chen, MK., Shapiro, J. (2007), Do Harsher Prison Conditions Reduce Recidivism? A Discontinuity-based Approach. *American Law and Economics Review*. 9(1); 1–29

Crewe, B., Warr, J., Bennett, P., Smith, A. (2014), The emotional geography of prison life, *Theoretical Criminology*. 18(1); 56-74

Crown Prosecution Service. (2019), *Prison-related Offences*. https://www.cps.gov.uk/legal-guidance/prison-related-offences-0

Danroth, R. (2018), On pins and needles: more support for prison needle exchanges, *BCMJ*, 60(2); 121-123

Edwards., BG., Albertson, E., Verona, E. (2017), Dark and Vulnerable Personality Trait Correlates of Dimensions of Criminal Behaviour among Adult Offenders, *Journal of Abnormal Psychology*, 126(7); 921–927

Einat, T. (2009), Inmate harassment and rape, *International Journal of Offender Therapy and Comparative Criminology*. 53(6); 648-664

Evans, T., Wallace, P. (2008), A prison within a prison? Men and Masculinities. 10(4); 484-507

Execution of Sentences Act (ESA) (Norway) - 18 May 2001, with appurtenant Regulations and Directives.

Fazel, S., Ramesh, T., Hawton, K. (2017), Suicide in prisons: an international study of prevalence and contributory factors, *Lancet Psychiatry* 2017;4: 946–52

Fazel, S., and Seewald, K. (2012), Severe mental illness in 33 588 prisoners worldwide: Systematic review and meta-regression analysis, *British Journal of Psychiatry*, 200(5); 364-373. doi:10.1192/bjp.bp.111.096370

Guin, S. (2009), A qualitative exploration of HIV/AIDS health care services in Indian prisons, *Journal of Correctional Health Care* 15(3); 179-189

Harm Reduction International. (2020), *The Global State of Harm Reduction 2020*. https://www.hri.global/files/2020/10/26/Global_State_HRI_2020_BOOK_FA.pdf.

Haualand, H. (2015), Punished and isolated: disabled prisoners in Norway, *Scandinavian Journal of Disability Research*. 17(S1); 74-87

Hean, S. Aakjær, M., Kloetzer, L. Seppännen, L. Kajamaa, A. Lahtinen, P. Murphy T (In press), A Colab Model of Workplace Transformation in The Criminal Justice Context In Improving Collaboration, Innovation And Organisational Learning In Penal Systems, Sarah Hean, Berit Johnsen, Anu Kajamaa And Laure Kloetzer (Eds) London: Palgrave

Heaslip, V., Hean, S., Parker, J. (2016), The etemic model of Gypsy Roma Traveller community vulnerability: is it time to rethink our understanding of vulnerability? *Journal of Clinical Nursing* 27(17/18) 3426-3435.

Hong QN, Pluye P, Fàbregues S, Bartlett G, Boardman F, Cargo M, Dagenais P, Gagnon M-P, Griffiths F, Nicolau B, O'Cathain A, Rousseau M-C, Vedel I. (2018), *Mixed Methods Appraisal Tool* (MMAT), version 2018. Registration of Copyright (#1148552), Canadian Intellectual Property Office, Industry Canada.

Hosani, S. (2019), From vulnerable people to vulnerable situations that breach human rights', The British Institute of Human Rights. https://www.bihr.org.uk/blog/from-vulnerable-people-to-vulnerable-situations-that-breach-human-rights.

Institute for Criminal Policy Research. (2017), *World Female Imprisonment List* (4th Edit). https://www.prisonstudies.org/sites/default/files/resources/downloads/world_female_prison_4th edn v4 web.pdf

Krienert, J., Walsh, J., Lech, L. (2014), Alternatives to abstinence: the practice of (un) safe sex in prison, *Criminal Justice Studies*. 27(4); 387-401

Kriminalomsorgen. (2020), About the Norwegian Correctional Service. https://www.kriminalomsorgen.no/

Lindbom, S., Larsson, M., Agardh, A. (2017), The naked truth about HIV and risk taking in Swedish prisons: A qualitative study, PLOS one. 12(7): e0182237, doi.org/10.1371/journal.pone.0182237 Listwan, S., Daigle, L., Hartman, J. and Guasterro, W. (2014), Poly-victimization risk in prison: The influence of individual and institutional factors, *Journal of Interpersonal Violence* 29(13); 2458-2481 Mackenzie, C., Rogers, W., Dodds, S. (2014), What is Vulnerability and why does it matter for moral therapy. IN Mackenzie, C., Rogers, W., Dodds, S., (Eds) *Vulnerability; new essays in ethics and feminist philosophy*. Oxford; Oxford University Press

Maier, K., and Ricciardelli, R. (2019), The prisoner's dilemma: How male prisoners experience and respond to penal threat whilst incarcerated, *Punishment and Society* 21(2); 231-250

Ministry of Justice (2018), *Managing Vulnerability: Women.* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file /721190/police-guidance-on-working-with-vulnerable-women-web.pdf

Moazen, B., Owusu, P., Wiessner, P., Stöveret, H. (2019), *Availability, Coverage and Barriers Towards Condom Provision in Prisons: A Review of the Evidence.*https://media.tghn.org/medialibrary/2019/01/FINAL Condoms in Prisons 21.11.2018.pdf

Murphy, G., Chiu, P., Triantafyllopoulou, P., Barnoux, M., Blake, E., Cooke, J., Forrester-Jones, RVE., Gore, N., Beecham, J. (2017), Offenders with intellectual disabilities in prison: what happens when they leave? *Journal of Intellectual Disability Research*, 61(10); 957–968

Murray C., (2020), 'Can't hack the whack': Exploring young men's discourses on time in prison. Criminology and Criminal Justice, 1-20 DOI:10.1177/1748895820914379

O'Neill Shermer, L., Sudo, H. (2017), Fear of rape from behind prison walls, *International Journal of Prisoner Health*. 13(2); 68-80

Orjiakor, C., Ugwu, D., Eze, J., Ugwu, L., Ibeagha, P., Onu, D. (2017), Prolonged incarceration and prisoners' wellbeing: lived experiences of awaiting trial/pre-trial/remand prisoners in Nigeria, *International Journal of Qualitative Studies in Health and Well-being*. 12(1); 1395677, DOI:10.1080/17482631.2017.1395677

Parker, J., Heaslip, V., Ashencaen Crabtree, S., Johnsen, B., Hean, S. (2020), People in contact with criminal justice systems participating in service redesign: vulnerable citizens or democratic partners.

In Hean, S., Johnsen, B., Kajamaa, A., and Kloetzer, L., (Eds) Improving collaboration, innovation and organisational learning in penal systems. London: Palgrave Macmillan.

Penal Reform International. (2018), *Global Prison Trends* 2018. London: Penal Reform International Pérez, D., Gover, A., Tennyson, K., Santos, S. (2010), Individual and institutional characteristics related to inmate victimization. *International Journal of Offender Therapy and Comparative Criminology* 54(3); 378-94. doi: 10.1177/0306624X09335244.

Pratt, J. (2008), Scandinavian Exceptionalism in an Era of Penal Excess. Part I: The Nature and Roots of Scandinavian Exceptionalism, *The British Journal of Criminology* 48(2); 119-137

Pratt, J., and Ericsson, A. (2014), *Contrasts in punishment: an explanation of anglophone excess and Nordic exceptionalism*. London: Routledge.

PRISMA checklist (2009). http://prisma-statement.org/documents/PRISMA%202009%20checklist.pdf
Purdy, I. B. (2004), Vulnerable: A concept analysis, Nursing Forum, 39(4), 25–33.

Ratkalkar, M., and Atkin-Plunk, C., (2020), Can I ask for help? The relationship among incarcerated males' sexual orientation, sexual abuse history, and perceptions of rape in prison. *Journal of Interpersonal Violence*. 35(19-20); 4117-4140

Ricciardelli, R., and Spencer, D. (2014), Exposing 'sex' offenders, *British Journal of Criminology*. 54; 428-448.

Rt Hon David Gauke, (2018), Prison reform speech. https://www.gov.uk/government/speeches/prisons-reform-speech

Sandelowski, M., Barroso, J., and Voils, C. I. (2007), Using qualitative meta-summary to synthesize qualitative and quantitative descriptive findings, *Research in Nursing and Health*, 30(1), 99-111.

Sander, G., Shirley-Beavan, S., Stone, K. (2019), The Global State of Harm Reduction in Prisons, *Journal of Correctional Health Care*. 25(2); 105-120. doi: 10.1177/1078345819837909. PMID: 31084277.

Smith, I., and McCarthy, D. (2017), The effects of prisoner attachment to family on re-entry outcomes: A longitudinal assessment, *British Journal of Criminology*. 57, 463–482

Sodhi-Berry, N., Knuiman, M., Preen, DB., Alan, J., Morgan, VA. (2015), Predictors of post-sentence mental health service use in a population cohort of first-time adult offenders in Western Australia, *Criminal Behaviour and Mental Health*, 25(5); 355-74

Spiers, J. (2000), New perspectives on vulnerability using emic and etic approaches, *Journal of Advanced Nursing*. 31, 715–721.

Tewksbury, R. (2012), Stigmatization of sex offenders, Deviant Behaviour. 33(8); 606-623.

Turner, B.S. (2006), Vulnerability and Human Rights. Pennsylvania: Penn State University Press.

UK Gov. (undated), *Staying in touch with someone in prison*. https://www.gov.uk/staying-in-touch-with-someone-in-prison

Umberson, D., and Montez, J. (2010), Social Relationships and Health: A Flashpoint for Health Policy, J Health Soc Behav. 2010; 51(Suppl): S54–S66. doi: 10.1177/0022146510383501

United Nations Human Rights. (2009), *Basic principles for treatment of prisoners*. https://www.un.org/ruleoflaw/blog/document/basic-principles-for-the-treatment-of-prisoners/

United Nations Educational Scientific and Cultural Organisation. (2018), *Protecting the human rights of prisoners*. https://en.unesco.org/courier/2018-4/protecting-human-rights-prisoners

United Nations Office on Drugs and Crime. (2014), A handbook for starting and managing needle and syringe programmes in prisons and other closed settings. https://www.unodc.org/documents/hivids/2017/ADV PNSP REV FEB2015with cover1.pdf

United Nations Office on Drugs and Crime. (2018), *The United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules)*. https://www.unodc.org/documents/justice-and-prison-reform/Nelson Mandela Rules-E-ebook.pdf

Valentine, C., Restivo, E., Wright, K. (2019), Prolonged isolation as a predictor of mental health for waived juveniles, *Journal of Offender Rehabilitation*. 58(4); 352–369

Van der Meulen, E. (2017), It goes on everywhere: Injection drug use in Canadian federal prisons, Substance use and Misuse. 52(7); 884-891

Walmsley, R. (2016). *World Prison Population List*. Institute for Criminal Policy Research. https://www.prisonstudies.org/sites/default/files/resources/downloads/world_prison_population_list_11th_edition_0.pdf

Whittemore, R., and Knafl, K., 2005. The integrative review: updated methodology. *Journal of Advanced Nursing*. 52(5); 546-553

Wolff, N., and Shi, J., 2009. Feelings of safety inside prison among male inmates with different victimization experiences. *Violence and Victims*. 24(6); 800-816

World Health Organisation., 2014. *Prisons and Health*. Denmark: WHO Regional Office for Europe Yang, S., Kadouri, A., Révah-Lévy, A., Mulvey, E., Falissard, B., 2009. Doing time: A qualitative study of long-term incarceration and the impact of mental illness. *International Journal of Law and Psychiatry* 32; 294-303