The psychological and emotional sequelae of committing an act of severe violence
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Acknowledgments

There are many people who have helped me in the process of writing this thesis and to whom I am hugely grateful.

The people I want to thank first and foremost are the men who agreed to take part. Their brutal honesty and willingness to openly discuss such a difficult experience and its consequences, with no real benefit to themselves of taking part, amazed and impressed me. I felt privileged to hear their stories.

My supervisors James McGuire and Susan Mitzman have both been a source of great support and encouragement. James' understanding of the methodology has guided me on several occasions when without him I would have almost certainly fallen down. His endless knowledge about, and interest in, forensic services and research has made it a pleasure to meet with him throughout this process.

Susan's support and enthusiasm in developing the research idea, recruiting participants and thinking about the clinical aspects of the project have been invaluable. Her understanding of the population and the difficulties they may suffer was vital throughout the process and her attention to detail in providing feedback on drafts made the process of writing much easier.

I am hugely grateful to the member of administrative staff, Sandra Hargate, who transcribed four of my interviews for me so quickly and efficiently that I had them back before I was even ready to use them.

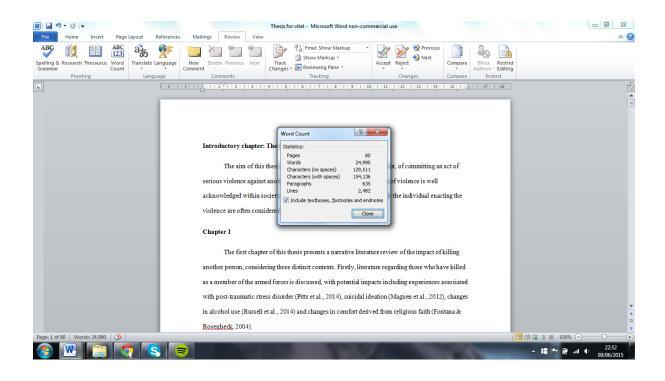
My partner Bill has been the most amazing support to me throughout the stressful last few months of this process, helping me and looking after me in every way I could possibly have asked. Without him, this would have been so much more difficult and I will forever be grateful for everything he has done.

Finally, I am incredibly grateful for my friends and family who have shown endless patience, both with my constant talking about this thesis and with my almost complete neglect of them towards the end of the process.

Table of contents

Introductory chapter: Thesis overview	1
Chapter 1: Narrative literature review	
The impact of taking a life: Considering the psychological consequences	
for those who legally or illegally kill another person	6
Introduction	7
Search methodology	8
Results	12
The impact of killing in combat	12
The impact of killing in the line of police duty	20
The impact of killing as a crime	22
The theory of moral injury	28
Discussion	30
Conclusions	34
References	35
Chapter 2: Empirical paper	
The psychological impact of committing a single violent offence with no	
known history of violence: A study within secure services	40
Abstract	41
Introduction	42
Design and methodology	45
Analysis	48
Reflexivity	49
Results	51
Discussion	61
Conclusions	66

References	68
List of Tables	
Table 1. Search terms and number of results	10
Table 2. Number of papers included at each stage of search process	11
List of Figures	
Figure 1. Working causal framework for moral injury by Litz et al. (2009)	29



Introductory chapter: Thesis overview

The aim of this thesis is to consider the impact, on the perpetrator, of committing an act of serious violence against another person. The impact of being the victim of violence is well acknowledged within society, whilst the psychological consequences for the individual enacting the violence are often considered to a lesser extent.

Chapter 1

The first chapter of this thesis presents a narrative literature review of the impact of killing another person, considering three distinct contexts. Firstly, literature regarding those who have killed as a member of the armed forces is discussed, with potential impacts including experiences associated with post-traumatic stress disorder (Pitts et al., 2014), suicidal ideation (Maguen et al., 2012), changes in alcohol use (Russell et al., 2014) and changes in comfort derived from religious faith (Fontana & Rosenheck, 2004).

Secondly, literature relating to the impact on police officers of killing in the line of duty is reviewed. This was a significantly less well researched area and what was available tended to be vague in its methodological reporting. One, more rigorously reported, piece of research was found during literature searches (Komarovskaya et al., 2011), but this study did not distinguish between killing or seriously injuring in the line of duty and as a result was not appropriate for use in this review.

Thirdly, literature is presented that investigates the impact of killing as an illegal act. The research in this area to date has primarily focused upon experiences associated with post-traumatic stress disorder (Gray et al., 2003; Pollock, 1999) and amnesia following the individual's offence (Woodworth et al., 2009). More recently, a qualitative piece of research has been conducted exploring participants' experiences of recovery when detained in a high secure hospital as a consequence of committing homicide (Ferrito, Vetere, Adshead & Moore, 2012).

Research addressing the impact of killing another in these three differing contexts is presented and critiqued, providing a broad summary of the different effects suggested in the literature. A model is then presented that may be relevant in explaining experiences resulting from killing in all three of these contexts. Litz et al.'s (2009) theory of 'moral injury' suggests that when an individual commits an act, such as killing, which is contravenes their strongly-held personal beliefs and values, and which they are unable to reconcile, they may experience a 'moral injury' which is associated with significant distress. Whilst this model was developed with members of the armed forces in mind, it may also be of relevance to police officers and those who have illegally killed. Additionally, it may help to explain why some people who kill are so deeply affected, whilst others seem not to be. The relevance and limitations of this model are discussed, comparisons are drawn across the three bodies of research and possible reasons for differences and similarities in the findings are suggested. Finally, the clinical implications and limitations of this review are presented and areas that may benefit from further research are identified.

As discussed above, the literature addressing the impact of committing homicide has had a relatively narrow focus to date. To the author's knowledge, no research has investigated the broader emotional and psychological sequelae, as reported by the perpetrator, of taking a life.

Chapter 2

The second chapter of this thesis presents a piece of qualitative research that attempts to further understanding of the impact of committing violence in specific circumstances. It explores the impact of committing a serious act of criminal violence, for individuals who have not committed any prior serious violent offences and who were recruited within high secure services. It is considered that someone who has engaged in a single, 'out of character' violent act, rather than as part of a pattern of repeated violent behaviour, may experience qualitatively different, or more severe, psychological and emotional sequelae. This idea is consistent with the model proposed by Litz et al (2009), described above. This exploratory research therefore focused upon those individuals who had committed a single act of serious violence, as an attempt to understand the experiences of a small number of

individuals who are experts in this phenomenon. To ensure there were sufficient potential participants meeting the inclusion criteria, it was decided that all those who had committed a single act of serious violence (defined as murder, manslaughter, attempted murder or grievous bodily harm) would be included irrespective of whether their actions had led to a death. It subsequently transpired, however, that all recruited participants had killed someone as a result of their single act of violence. Potential reasons for this are presented in the discussion of the empirical paper. To the author's knowledge, this is the first piece of qualitative research specifically exploring the impact on the perpetrator of a single, 'out of character', act of violence.

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Chapter 1: Narrative literature review

The impact of taking a life: Considering the psychological consequences for those who legally or illegally kill another person

Janet Evans

Introduction

There are a number of contexts in which a person may kill another individual, including legal actions, such as a soldier shooting another combatant during war, and illegal actions, such as murder and manslaughter. Understanding of the psychological consequences associated with the act of killing is developing with increasing research, and this narrative review aims to summarise and synthesise the evidence to date, and consider the clinical implications. Research of this type tends to be compartmentalised, separately exploring the impact of killing as member of the armed forces, in the line of duty as a police officer and in the context of criminal behaviour. As such, the research in each of these distinct areas is reviewed. Furthermore, a model is presented and discussed that, although developed with members of the armed forces in mind, may be applicable in all of these contexts.

The act of killing in each of these contexts may vary in a number of ways. In recent years there have been numerous military conflicts, including the Vietnam War, the Iraq War and military operations in Afghanistan. When on active duty, members of the armed forces may frequently be required to shoot at the enemy, often in response to genuine threat to their lives. They may experience prolonged periods of threat and may witness or commit multiple acts of killing over the length of their service, having received significant preparatory training. Public perception of the military tends to be, on the most part, favourable, with widespread media support for service personnel. The actions of the armed forces are sanctioned by the government and the actions of the individual are generally in response to orders from senior officers. As a result, the act of killing another person in this context may be validated, permitted and even romanticised by society.

According to the Office for National Statistics (2015), 526 incidents of homicide were recorded in England and Wales in the year 2013-2014. The act of killing another in the context of murder or manslaughter may vary significantly from doing so in the military. Criminal killing can occur for a variety of reasons and is not necessarily precipitated by real or perceived risk to the perpetrator, although it can be. The societal response to killing illegally is often different to that regarding killing on military operations. Mitchell and Roberts (2010) suggested that murder is

considered one of the most serious offences and tends to attract significant public and media attention. Those who are convicted of murder or manslaughter frequently receive lengthy prison terms or spend a number of years in secure psychiatric services, acting as a concrete indicator of society's view that they have done wrong.

The Independent Police Complaints Commission (2014) reported that in the year 2013-2014 there were no shootings by police in England or Wales that resulted in fatality. Research addressing the impact of police killing tends to be based in the USA, where guns are carried by the majority of police officers, and a comparatively large number of people are killed by them. Similarly to members of the armed forces, police officers who carry guns will have received significant training and may be acting in response to orders from senior colleagues. However, their exposure to threatening situations is likely to be sporadic and less prolonged than for those serving in a combat zone. Societal response to police officer killing may also be more mixed. There have been recent examples of protests prompted by public perception of wrongful killing by police officers, and whilst there have been other contributory factors in these protests, the depth of negative public emotion is clear. Police officers may also face a potentially lengthy investigation into their actions, something that would rarely occur as a result of killing an enemy combatant.

Whilst there is a growing body of research exploring the psychological consequences of killing in combat situations, and, to a lesser extent, killing in the context of criminality or within the police force, there appears to be little or no research considering similarities or differences across these contexts. This narrative review aims to consider the current literature regarding the following question – what are the potential psychological consequences of killing another person, as a member of the armed forces, in the line of duty as a police officer or in the context of a criminal act?

Search methodology

Searches for relevant literature were undertaken between 26th October 2012 and 22nd February 2015 and included English-language articles that were published from 1990 to the present day. The searches were conducted using the following databases: PsycINFO, PsycARTICLES, CINAHL Plus,

Medline, National Criminal Justice Reference Service Abstracts and Web of Science. Due to the varied nature of literature that was required, three different searches were conducted. The search terms used for each are shown in Table 1. Exact numbers of results are provided for the final searches, following the removal of duplicated findings.

Search number	Search terms	Web of Science	PsycINFO, PsycARTICLES, CINAHL Plus,		
			MedLine, National Criminal Justice Reference		
			Service Abstracts		
1.	"kill*" OR "murder" OR "manslaughter" OR	Approx. 829,377	Approx. 189,166		
	"homicide" OR "assassin*"				
2.	"impact" OR "effect" OR "consequence"	Approx. 28,971,592	Approx. 3,510,055		
3.	"commit" OR "perpetrat*"	Approx. 146,728	Approx. 36,248		
4.	1. AND 2. AND 3.	833	554		
	(criminal search)				
5.	"military" OR "war*" OR "soldier" OR "combat"	Approx. 2,465,607	Approx. 739,109		
	OR "battle" OR "sniper" OR "veteran"				
6.	1. AND 2. AND 5.	4,237	2,361		
	(armed forces search)				
7.	"police" OR "law enforce*" OR "cop" OR	Approx. 182,427	Approx. 101,764		
	"armed respon*" OR "officer" OR "deadly force"				
8.	1. AND 2. AND 7.	990	1,054		
	(police search)				

Table 1. Search terms and number of results

Table 2 provides the number of papers that were included at each stage of review. In the armed forces search, nine articles were duplicated across the two database searches, resulting in a total of 16 different articles.

Stage of Criminal search		Armed forces search		Police search		
search						
Databases	Web of	PsycINFO	Web of	PsycINFO	Web of	PsycINFO
	Science	etc.	Science	etc.	Science	etc.
Initial number	833	554	4,237	2,361	990	1,054
of results						
Number of	37	25	40	28	10	39
abstracts						
reviewed						
Number of full	7	10	17	17	0	14
articles						
reviewed						
Number of	5	7	13	12	0	5
appropriate full						
articles						

Table 2. Number of papers included at each stage of search process

Papers were excluded if they did not provide information explicitly regarding the impact of killing, for example some were excluded because they did not differentiate between murder and attempted murder. Papers exploring the impact upon children who killed were excluded as this review focusses upon adults. The reference lists of included papers were reviewed for further literature that met the search criteria, resulting in an additional four criminal articles and eight armed forces articles. Papers were then considered with regards to their relevance, frequency with which they had been

cited (allowing for length of time since publication) and to ensure that all identified areas of research were represented in this review.

Results

The impact of killing in combat

Of the three contexts included in this review, the psychological impact of killing as a member of the armed forces was the most fully researched. Often, the literature did not focus exclusively on the act of killing, but instead identified a number of combat experiences, such as 'killing', 'fighting' or 'threat to oneself', and made comparisons between these with regard to their impact. A section of the literature failed to distinguish between 'killing or injuring' another and therefore these papers were not included. There were also a number of excluded papers that referred to 'abusive' violence, without differentiating between experiences such as killing civilians, torturing people or disfiguring bodies, so that it was impossible to consider only the consequences of killing. Papers were also excluded if they focused on genocide, as this seemed likely to differ significantly from the typical experience of war and may therefore be better addressed in a separate review, or if they reported incidents of ordering others to kill as opposed to playing a direct role in the commission of the act.

The National Vietnam Veterans Readjustment Study (Kulka et al., 1988)

Several of the articles included in this section of the review are based on data collected as part of the National Vietnam Veterans Readjustment Study (NVVRS), a large, Congress-ordered study which took place in the United States during the 1980s. The aim was to investigate the prevalence of different psychological problems, in particular post-traumatic stress disorder (PTSD), experienced by veterans. Data were collected from three groups; veterans who had served in Vietnam, Laos or Cambodia (n = 1,638), veterans who had been on active duty during this period but had not served in these areas (n = 716), and those who were not in the military (n = 668). The main data collection comprised a self-report questionnaire including items assessing, among other things, parenting and educational history, military experience, stressful and traumatic life events and post-service adjustment. These questions included a modified version of what is now known as the Mississippi

Scale for Combat-Related PTSD (Keane, Caddell & Taylor, 1988), a self-report measure that is used to assess PTSD symptoms related to combat experiences. A clinical interview was also conducted with Vietnam based (n=343) and non-Vietnam based (n=116) veterans. Interviews included the Structured Clinical Interview for the Diagnostic and Statistical Manual (DSM) – 3rd Edition, Revised – non-patient version (SCID-NP-V; Spitzer, Williams, Gibbon & First, 1990), a semi-structured interview that assesses symptoms related to mental health diagnoses within axis I of the DSM. The Impact of Events Scale (IES; Horowitz, Wilner & Alvarez, 1979) was also administered, assessing distress levels for a number of different experiences in the previous week. The spouse or co-habiting partner of 466 Vietnam based veterans was also interviewed. Several researchers have since used data from the NVVRS, conducting secondary analyses and reporting their findings regarding various elements of the original data.

Research using data from the NVVRS

Fontana and Rosenheck (1999) suggested that a model should be developed to distinguish between different combat experiences, so that their impact could be investigated in more detail. They used structural equation modelling with two sub-samples of data (n = 599 in each sub-sample) from the Vietnam based veterans of the NVVRS, one to develop the model and the other to cross-validate it. They used the data that had been collected regarding combat experiences and using the Mississippi Scale for Combat-Related PTSD (hereafter referred to as the Mississippi Scale), to analyse relationships between the suggested variables and their relationship with PTSD. Fontana and Rosenheck's (1999) final model was found to have good levels of fit (comparative fit index -1^{st} subsample = 0.923, cross-validation sub-sample = 0.902) and parsimony (parsimonious goodness of fit -1^{st} sub-sample = 0.542, cross-validation sub-sample = 0.541). The model identified several different combat experiences: 'field placement' (e.g. location), 'physical conditions' (e.g. climate), 'insufficiency of environment' (e.g. shortages of food), 'fighting', 'exposure to death and injury of others', 'perceived threat to self', 'killing' and 'committing atrocities other than killing'. The authors found a strong direct effect of 'killing' on PTSD (r = 0.47 and r = 0.48 in the two sub-samples respectively), though the data they were using did not allow them to separate killing as part of

expected combat behaviour from killing whilst participating in atrocities. They also found a direct relationship between 'killing' and 'committing atrocities' (r = 0.65 in both sub-samples), suggesting that once an individual had engaged in the former they were more likely to engage in the latter. It is possible that once the moral inhibition against killing has been broken, it is easier for other inhibitions to be weakened as well. The final model only accounted for 32% of the variance in PTSD, suggesting that, whilst combat exposures are important factors, others factors also require further study.

MacNair (2002) analysed the Mississippi Scale data from the Vietnam based veterans of the NVVRS, comparing the scores of those who had answered 'yes' (n = 693) to a question regarding whether they believed they had killed anyone during the war with the scores of those who had answered 'no' (n = 963). Those who had killed had significantly higher scores on the PTSD measure, with a large effect size (Cohen's d = 0.97), than those who had not. The study attempted to account for any potential effect caused by the commission of atrocities, by removing the data of a subset of individuals who reported killing or injuring women, children, elderly people, prisoners or civilians. Whilst this reduced the effect size (Cohen's d = 0.74), there was still a significant difference in severity of PTSD between those who had killed within 'normal' wartime actions and those who had not killed. When exposure to battle, as self-reported within the NVVRS, was held constant, having killed still predicted higher scores on the PTSD scale.

More recently, research has been conducted into differences in PTSD experiences based on actively killing compared to witnessing death. Van Winkle and Safer (2011) used the Mississippi Scale data from the NVVRS, as well as items that directly asked about, or implied, witnessing or being actively involved in killing. The inferential items were used to address the criticism that previous research had relied solely on participants' report, but it is possible that some questions may not have accurately measured what was intended. The authors also used data from interviews with the veterans' spouses, regarding physical abuse (n=376). Van Winkle and Safer found that, after using a sequential regression to partial out the influence of witnessing trauma, both self-reported and inferred killing predicted PTSD ($\Delta R^2 = 0.03$, p < 0.001; $\Delta R^2 = 0.02$, p = 0.005 respectively). Responses to the

inferential measure of killing also predicted increased physical violence toward the spouse, though this relationship was weak ($\Delta R^2 = 0.01$, p = 0.053).

Maguen et al. (2012) used the depression, PTSD and alcohol use items of the SCID-NP-V (Spitzer, Williams, Gibbon & First, 1990) data of the NVVRS to investigate the relationship between killing and suicide (n = 259). They found that those who reported suicidal ideation but no previous suicide attempts reported higher experiences of killing and were more likely to meet the criteria for depression, PTSD and substance use problems, compared to those who reported no suicidal ideation or those who reported previous suicide attempts. After depression, PTSD, substance use and non-killing combat experiences were controlled for, those with more killing experiences were twice as likely to have suicidal ideation as those with little or no reported killing. This suggests that the experience of killing may be independently associated with suicidal ideation.

There are a number of limitations associated with research using data from the NVVRS. The questions of the original NVVRS were designed to assess experiences related to military service at least three decades ago, which may be significantly different to more recent experiences. The data were collected via self-report approximately a decade after the end of direct US military involvement in the war and so relied on participants' memories, and were not originally meant to answer the questions posed by some of the later research.

Other research, not using the NVVRS

Pitts et al (2014) used data collected from combat medical staff (n = 345) approximately three months after they returned from either Iraq or Afghanistan as part of a larger study looking at the impact of combat on mental health and resilience. The participants' primary military role involved providing front line medical care but they also fought when under attack. Data were collected in the full study using the Combat Experiences Scale (CES; King, King and Vogt, 2003) and the Aftermath of Battle Scale (ABS; King, King and Vogt, 2003), as well as the Combat Experiences (Castro & McGurk, 2007), though no further description of these measures is provided. For the purposes of this research, Pitts et al. selected eleven items from across these measures as identifying three groups of

participants who had witnessed others injured or killed, attempted to kill, or had killed. The internal consistency of the items identifying each of these three groups was found to be acceptable ($\alpha \ge 0.80$). Participants also completed the PTSD Checklist – Military Version (PCL-M; Weathers, Litz, Herman, Huska & Keane, 1993), a self-report measure that assesses 're-experiencing', 'active avoidance and emotional numbing' and 'hyperarousal'. Pitts et al. found that having killed was significantly correlated with having attempted to kill (r = 0.56, p < 0.001) and with PTSD (r = 0.14, p < 0.01). Using a sequential multiple regression the authors reported that when killing was accounted for, witnessing trauma no longer predicted PTSD, only attempting to kill did ($\beta = 0.15$, p = 0.033). However, killing did not predict PTSD. Whilst this latter finding contradicts other studies, only a small number of participants (9%) reported having killed someone, and so this should be interpreted with caution. One limitation of this research may be the decision to use implicit questions, such as whether participants had shot at the enemy, to assess whether participants had attempted to kill someone. Whilst this aimed to expand on Van Winkle and Safer's (2011) use of inferential items described above, the questions may not have properly captured the desired idea. It is also possible that, as trained medical staff, the participants in this study realised what was being assessed and were aware of the potential stigma associated.

Maguen et al. (2011) investigated the relationship between killing and post-traumatic stress symptomatology (PTSS), alcohol use and depression in U.S Gulf War veterans (n = 317). PTSS was assessed using the PCL-M (Weathers, Litz, Herman, Huska & Keane, 1993). Alcohol use was assessed by questioning frequency and amount of alcohol consumption, as well as using the CAGE (Ewing, 1984), a four-item dichotomous measure assessing indicators of problematic alcohol use, the name of which is an acronym for its questions. Depression was measured using a modified version of the Beck Depression Inventory – Primary Care (BDI-PC; Beck, Steer, Ball, Ciervo & Kabat, 1997), in which participants were asked to rate symptoms of depression on a 5-point scale. Combat exposure was assessed with four questions, referring to experiences of 'perceived danger', 'witnessing killing of a fellow soldier', 'exposure to death and dying' and 'killing'. However, no explanation is provided regarding the development, reliability or validity of these items. After controlling for the other

exposures, 'killing' significantly predicted PTSS (β = 0.11, p < 0.05), alcohol use (β = 0.20, p < 0.05) and problematic alcohol use (β = 0.21, p < 0.05). With regards to alcohol use, killing was the only war zone experience that was significantly predictive.

Russell et al. (2014) conducted a prospective, longitudinal study of changes in alcohol use after deployment to Iraq, with members of the National Guard Infantry. Alcohol misuse was measured with the TICS (Brown, Leonard, Saunders & Papasouliotis, 2001) as well as two items assessing frequency and quantity of drinking. Whilst these measures were self-report, they were conducted anonymously, minimising the likelihood of socially desirable responding. Combat experiences were assessed using the Combat Experiences Scale described above (CES; King et al., 2003), items of which were categorised based on a modified version of Fontana and Rosenheck's (1999) model of combat experiences, such that they assessed exposure to 'fighting', 'killing', 'threat to oneself', 'death/injury of others', 'atrocities' or 'positive experiences'. Russell et al. performed a logistic regression and found that only 'killing' impacted on post-deployment alcohol misuse as compared to pre-deployment misuse, such that misuse decreased in those who had killed ($\beta = 0.29$, p < 0.01). Whilst this seems to contradict other studies, this is the first prospective study in this area, taking account of pre-deployment behaviour. It is possible that the act of killing another human being caused individuals to consider their own mortality, thereby leading to a reduction in alcohol misuse. However, Killgore et al. (2008) explored the relationship between risk-taking behaviour and combat experiences. Participants (n = 1,252) completed the CES upon return from Iraq, items from which were grouped into seven categories using principal components analysis; 'violent combat exposure', 'human trauma exposure', 'survived a close call', 'buddy killed or injured', 'killed enemy', 'killed friendly/non-hostile' and 'pride in mission'. Three months later, participants completed the Evaluation of Risks scale (EVAR; Killgore, Vo, Castro & Hoge, 2006). The EVAR assesses risk-taking propensity, divided into five subscales; 'self-control', 'danger seeking', 'energy', 'impulsiveness' and 'invincibility', as well as providing a total score. The authors found that having killed an enemy was positively correlated with risk-taking propensity (r = 0.11, p ≤ 0.001), danger seeking (r = 0.12, p \leq 0.001), beliefs about self-control (r = 0.08, p < 0.005) and perceptions of invincibility (r = 0.10, p \leq

0.001). The authors also presented findings relating to the association between killing a civilian or an ally and risk-taking propensity, however, upon reviewing the specific CES items comprising this experience, a number of items were included that may not necessarily be indicative of killing, such as 'witnessing brutality/mistreatment toward non-combatants'. As a result, there is a lack of clarity regarding what this factor actually reflects and these findings are not included here. Using stepwise linear regression the authors found that killing an enemy was also positively correlated with having engaged in a number of actual risk behaviours in the month prior to completing the measures, namely drinking more than the individual meant to (r = 0.08, p < 0.005), damaging property (r = 0.07, p < 0.05), verbal aggression (r = 0.07, p < 0.05), threatening to assault $(r = 0.12, p \le 0.001)$ and physically assaulting others (r = 0.06, p < 0.05). Whilst this seems to contradict Russell et al.'s suggestion that taking a life might cause people to consider their mortality, it is important to note that Killgore et al.'s research did not account for pre-deployment behaviour. It is possible that those who are already more likely to engage in risky behaviours are also more likely to kill others.

Fontana and Rosenheck (2004) explored the relationships between PTSD, exposure to trauma, guilt, change in level of religious faith, social functioning and use of mental health services in veterans. The authors used data that were originally collected as part of an evaluation of specialist inpatient (n = 831) and outpatient (n = 554) services for veterans with PTSD between 1989 and 1994 (total n = 1,385). Of the total number of participants, 94% of the participants had a diagnosis of PTSD. The data regarding participants' traumatic exposures was based on the impression of clinicians involved in their treatment and whilst this avoided reliance on participants' reporting of traumatic exposure, it instead provided a subjective and unverified account. Changes in level of religious faith were assessed by comparing the response to an item asking how much religion was a source of comfort and strength, both at the time of the study and retrospectively at the time they joined the military, measured on a three-point scale. The Laufer-Parsons Guilt Inventory for combat-related experiences (Laufer & Frey-Wouters, 1988) was used to assess guilt, whilst PTSD was assessed using the Mississippi Scale with five items relating to guilt removed to prevent overlap. The authors reported that actively causing someone's death led to a reduction in the level of comfort derived from

faith (standardised regression coefficient = -0.08) and an increase in guilt (standardised regression coefficient = 0.34), both of which contributed to greater use of mental health services (standardised regression coefficient = -0.08 and 0.09 respectively). The authors found no direct effect of PTSD on use of mental health services, suggesting that engagement was motivated by guilt and reduction in faith, rather than severity of PTSD.

There are a number of limitations to the studies described above. Firstly, many gathered data via self-report measures after soldiers returned home, so that participants were asked to remember events retrospectively, potentially from many years ago. Fontana and Rosenheck (2004) gathered data about combat exposure without the use of self-report measures, but did rely on the subjective opinions of clinicians. Secondly, and with the exception of Russell et al.'s (2014) research, they were also retrospective, making it difficult to account for baseline experiences prior to deployment. Thirdly, the measures used were generally designed for screening and were not designed to be used diagnostically. Finally, many of these studies did not differentiate between killing in a way that would be seen as acceptable war behaviour, i.e. killing an enemy combatant, versus the abusive killing of a civilian or prisoner. As suggested by MacNair's (2002) findings, this differentiation may have an impact on levels of PTSD and it is conceivable that other consequences may also differ as a result of this distinction.

All of the research discussed to this point has been quantitative, which is reflective of the broader literature available. However, a recent study by Jensen and Simpson (2014), qualitatively explored the impact of killing someone in hand-to-hand combat. Whilst this still concerns the action of taking a life in a socially sanctioned and legal manner, it may be quite a different experience to the way the majority of killing in combat is carried out. Interviews were conducted with nine individuals who had killed another through hand-to-hand combat and these were interpretively analysed (though no specific methodology is described) to produce a rich description of the individual's experience. The act of killing was described negatively and for seven of the nine participants was perceived to be necessary to maintain their own safety. Many of the participants described feeling an emotional impact to what had happened shortly after the incident, generally when they were left alone and

activity had subsided. They described feeling as though the experience of killing someone in this manner was more powerful and felt distinct from other methods of killing, such as shooting.

Contrastingly, two participants stated that they did not experience any impact of having taken a life, instead compartmentalising and rationalising their actions. This may reflect a moral disengagement on their part, through which they were able to distance themselves from the individual with whom they were fighting, in order to enable them to carry out the act of violence. It is important to consider the suggestion that hand-to-hand combat was more stressful for many participants than other types of killing, as it raises the question of whether considering simply the impact of killing, without exploring the method or circumstances, provides the full picture. This research has a number of limitations, including the small number of participants, the potential bias that it only included individuals who were willing to discuss their experiences, and it does not provide much detail with regard to the process of analysis. However, the use of a peer group of interpretative researchers to challenge assumptions and biases of the primary researcher lends greater strength to the analysis.

The impact of killing in the line of police duty

Much less research has been conducted into the experience of police officers who kill in the line of duty. The majority of the research that has been undertaken appears to have taken place in the USA, which may be a reflection of the number of police officers carrying weapons, particularly in comparison to the United Kingdom where only a small proportion of the force do so. Incidents in which individuals are killed by police officers can be complex in that several officers may fire their weapons at the same individual and all believe that they played a part in killing them.

Brubaker (2002) reviewed incidences of police use of deadly force from 1981 – 2000 in Minnesota, USA, amounting to 78 incidents resulting in 80 civilian deaths. There were in total 148 officers who fired their weapons at the individuals that died. The author reviewed investigative reports and media coverage of each incident, as well as interviewing several of the officers involved, in an attempt to understand the feelings and needs of those officers who were involved and the impact of the consequent investigation. The author found many officers felt tactically prepared for the incident,

but not prepared for the psychological consequences for themselves and those close to them. Some participants reported re-experiencing the incident when faced with a similar situation or when they returned to the geographical location where it occurred. The majority of participants felt that they were supported by their peers subsequent to the death, though some felt that the image of their department was prioritised over their own wellbeing by senior staff. Four officers left their jobs as a direct result of the incident. A significant limitation of this research is the lack of information that is provided with regards to the methodology. No information is included detailing the number of participants that engaged in an interview, the interview process or how data were gathered from reports. The reporting of officers' experiences subsequent to the incidents is also relatively brief.

The U.S. Department of Justice published a collection of papers that had been submitted to the Federal Bureau of Investigation Suicide and Law Enforcement Conference held in Virginia in 1999. These included a number that discussed the phenomenon of 'suicide by cop'. This term refers to an individual attempting to cause their own death by provoking a police officer into shooting them. Often, it is unclear whether this has been intentional, though at times individuals have left suicide notes or made comments to this effect. Marzella (2001) presented seven case studies, five of which referred to fatal shootings. The officers in these cases reported a number of experiences associated with PTSD, including re-experiencing of the event, hypervigilance, disturbed sleep and feelings of irritability. A common theme across Marzella's case studies was a sense of anger toward the individual who died, specifically for taking the control from the officers and making them feel as though they had no choice but to shoot. Several participants described feeling as though they had developed a greater respect for death, but were also more suspicious of the public and more protective of their family. Some of the participants also considered leaving their jobs. Prial (2001) presented five incidents and discussed the psychological impact of taking a life on the police officers involved. Police officers swear to protect the public and may therefore experience the act of killing someone as being strongly contradictory to their training and to their personal beliefs. The author suggested that pressure to justify one's actions may often preclude officers from feeling able to talk freely about their experience and its impact. Prial suggested that many officers report an initial sense of disbelief

regarding what has happened, followed by experiences associated with PTSD such as intrusive thoughts and sleep disturbance. They may ruminate on their actions, questioning how they responded and whether they could have done anything differently, as well as considering their own mortality. Prial also considered the reaction of officers when it was confirmed that the incident had been a deliberate suicide attempt, with police officers reporting relief, anger, a perception of the act as cowardly and, conversely, compassion for the distress of the individual. This research, as well as Marzella's (2001) described above, is limited by a significant lack of clarity in the reporting of the methodology.

This is an under-researched area, with little literature focusing specifically on the impact of fatal incidents. One article was found that was more recent and methodologically rigorous (Komarovskaya et al., 2011), however, it discussed the impact of causing death or injury in the line of duty without distinguishing between the two and was therefore not included. Further research in this field should consider the impact specifically of killing, including greater numbers of participants in order to provide more reliable and potentially generalisable findings.

The impact of killing as a crime

The psychological impact of killing as a criminal act has been researched less fully than the act of killing in combat. However, this is still an important area to consider. The context in which someone illegally kills another is likely to be very different to the war-zone contexts relevant to the research described above. The consequences and responses of others are also likely to be very different. Killing in combat or as a police officer is socially sanctioned and often directly ordered, whilst illegal acts of killing are highly condemned by society and often result in harsh punishment. It is likely that the experience of killing illegally and without the sanction of society would be more psychologically distressing. On the other hand, it is possible that some of those who kill illegally are less concerned with social constraints and would therefore not be affected by this. Some of the research discussed here presents findings relating to participants who committed non-fatal violence,

but these articles were only included if the authors distinguished between fatal and non-fatal violence and presented results relating specifically to the impact of killing.

Pollock (1999) hypothesised that the reactions of those who had killed might vary depending on their personality and the type of violence, with different psychological responses associated with instrumental and reactive violence (Dodge, 1991), the former being a planned means of achieving or obtaining something and the latter being an impulsive response to perceived provocation. The author hypothesised that reactive violence may be associated with greater levels of PTSD than instrumental violence and suggested that the personality of the offender, based on Blackburn's (1993) typology of violent offender personalities, may also lead to varied responses. Blackburn proposed four types of violent offenders, two under-controlled types referred to as primary psychopaths and secondary psychopaths, and two over-controlled types referred to as controlled and inhibited. Blackburn defined primary psychopaths as aggressive and sociable, secondary psychopaths as aggressive and socially withdrawn, controlled offenders as controlled and sociable and inhibited offenders as controlled and socially withdrawn. Pollock hypothesised that those identified as either primary or secondary psychopaths would tend to show more instrumental violence, as suggested by Cornell et al. (1996), and therefore would suffer lower levels of offence-related PTSD. Those identified as controlled or inhibited would engage in more reactive violence and suffer greater levels of offence-related PTSD. In testing these hypotheses, Pollock identified 80 participants who had been convicted of homicide, 20 of whom fit each of the four personality types. The PTSD Interview (Watson, Juba, Manifold, Kucula & Anderson, 1991), a structured interview assessing DSM-III-R criteria for PTSD, was conducted with each participant. An additional question was included that asked participants to subjectively state whether they felt their trauma related to their offence. The offence was independently rated by another clinician regarding whether the violence was instrumental or reactive. Pollock found that 52% of the sample met the criteria for PTSD, with 95% of these individuals having committed reactive violence and 82% having reported finding the offence traumatic. The findings also suggested that those with an over-controlled (controlled or inhibited) personality type were more likely to have committed reactive violence, to report that the offence was traumatic and to meet the

criteria for a diagnosis of PTSD. It may be a limitation of this study that categorising people by personality type is an oversimplification of this complex concept. It is also possible that dichotomising violence as either reactive or instrumental prevents consideration of more subtle variations. However, it is useful that this research attempts to explore some of the concepts that might contribute to, or mitigate against, the experience of committing violence as traumatic.

Gray et al. (2003) investigated the prevalence of experiences associated with PTSD in a sample of participants admitted to secure hospitals. Participants completed a semi-structured interview to assess offence-related PTSD based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R), as well as self-report measures assessing PTSD experiences (Impact of Events Scale; Horowitz, Wilner & Alvarez, 1979), anxiety (State-Trait Anxiety Inventory; Spielberger, Gorscuh & Lushene, 1970) and depression (Beck Depression Inventory; Beck & Steer, 1987). Participants' offences were murder, other violence not resulting in death, rape, arson or sexual offences against children. Gray et al. hypothesised that those who had committed murder would experience greater rates of offence-related PTSD symptoms than those who had committed other violence, and there was a marginally significant difference in Impact of Events Scale (IES) scores to support this (p = 0.065). Findings also showed that those whose violence was fatal experienced significantly more intrusive PTSD symptoms, compared to those whose violence was not fatal. One limitation of this study is that some of the participants did not feel emotionally able to undertake the interview and as a result the analysis focused solely on the IES scores, though there was a strong relationship between these and the results of the interview. These findings should be interpreted with caution as the groups were small and disparate in size.

Papanastassiou, Waldron, Boyle and Chesterman (2004) researched the prevalence of offence-related PTSD in participants who had committed fatal violence, as well as characteristics of the offender and victim associated with PTSD. The participants were admitted to a secure hospital (n=19) and had a primary diagnosis of mental illness, potentially excluding individuals who had psychotic experiences at the time of their offence but whose primary diagnosis was personality disorder. Participants engaged in a structured interview using the Clinician-Administered PTSD Scale

(CAPS; Blake et al., 1995) which assesses the symptoms of PTSD as defined by the DSM-IV and five other features, namely 'guilt', 'dissociation', 'depersonalization', 'derealization' and 'reduction in awareness of surroundings'. The use of this interview has been encouraged with offenders (Pollock, 1999), though in this case it was adapted to focus specifically on symptoms related to the participants' offences. Papanastassiou et al. found that 58% of participants had met the criteria for PTSD related to their offence at some point since it occurred, whilst another 21% would have met the criteria for partial PTSD. At the time of the study, 26% met the criteria for full PTSD related to their offence, whilst another 16% met the criteria for partial PTSD. Of the twelve individuals who had killed a member of their family, eight met the criteria for full PTSD and the other four for partial PTSD. This is an important finding that is likely specific to the literature regarding killing in a criminal context, because it is highly unlikely that a member of the armed forces or a police officer would be placed in a position in which they were required to kill a relative. Finally, this study found a significant positive relationship between guilt and PTSD. One limitation of this research is the small sample size, which leaves scope for these findings to be replicated in larger studies in order to improve generalisability.

Ferrito, Vetere, Adshead and Moore (2012) conducted semi-structured interviews with seven individuals admitted to a high secure hospital who had committed homicide, focusing on their experiences of recovery and redemption since their offences. The interviews were analysed using interpretative phenomenological analysis. Ferrito et al. describe a number of themes, including some that relate to experiences prior to the participants' offences. For the purposes of this review, only those themes that relate to the consequences of having killed someone are discussed. The theme of *confusion* was identified, with some participants describing finding it difficult to understand what had happened in the time subsequent to their offence, taking some time to come to terms with it, and feeling overwhelmed and exhausted from trying to expel intolerable feelings related to their actions. All of the participants referred to the idea that *therapeutic intervention* had helped them, as a way of *reframing events*. The idea of *internal integration* of the offence was also identified as an important theme, relating to the experience of developing a new sense of self. The majority of participants referred to the desire to make some form of *repayment* for their actions, as well as to find some

purpose in their lives as a means of coping with what they had done. Some participants reported negative experiences with staff at the hospital, or *communication breakdown with professional*, which led to them feeling isolated and passive, as well as feeling ashamed and with a sense of *stigmatisation* as a result of their offences. Limitations of this study include the selection bias of including only participants who had engaged in therapy, so that the study excluded those who at the time did not feel able, or motivated, to engage with this process. As participants were initially approached by their clinical teams, there is a possibility that their interviews were also biased by wanting to please those involved in their care, despite the reassurance that the research was separate to this.

In recent years, there has been an increasing amount of research investigating claims of amnesia for violent offences. This is a potentially controversial area with regard to its impact on the legal process. It also has added complexity due to the possibility that people may be reluctant to fully disclose details of their offence for fear that this will result in a lengthier period of detention or judgmental response from others, or because of the potential protective function of incomplete memory for violence. Despite this, it is still an important area to consider. In order to avoid this controversy as much as is possible, this review will consider some of the research that relates to participants who have already been through the legal process.

Pyszora, Barker and Kopelman (2003) reviewed the records of all individuals who received life sentences in England and Wales in 1994, looking for evidence that they had ever claimed they were experiencing amnesia. Of the sample, 80% received sentences for murder. The researchers found that 31.4% of those incarcerated for murder reported experiencing some level of amnesia. A significant limitation of this study is that it relies solely on the mention of claimed amnesia within records without evaluating the reliability of this. If the reports that were reviewed had been compiled as part of the legal process then there may have been bias related to anticipated legal benefits of reporting amnesia.

Woodworth et al. (2009) assessed memory for three events – homicide, violence that did not result in death and a positive event – in 50 individuals incarcerated for homicide. Participants

completed the IES (Horowitz, Wilner & Alvarez, 1979) and the Dissociative Experiences Scale (DES; Bernstein & Putnam, 1986) which assesses the extent to which responders tend to dissociate. Participants also completed the Memory Assessment Procedure (MAP; Porter & Birt, 2001) which allows objective assessment of memory by allowing coders (in this case two individuals who were naïve to the study) to score for factors such as number of words and details. This also includes a subjective element called the Emotional Memory Survey (EMS) in which participants answer questions regarding how much they feel they remember about an event. Participants reported higher levels of amnesia for homicide than for other violence or positive memories. Approximately a third reported that they had been unable to remember certain aspects of the homicide, which was significantly higher than for the non-fatal violence or the positive memory. Despite this, the memories for homicide actually tended to be recalled as subjectively more vivid and with more sensory detail, and objectively descriptions were scored as containing three times more detail on average than the other events recounted. Participants reported that committing the homicide was experienced as stressful, anxiety provoking and associated with PTSD related experiences, which is consistent with evidence suggesting that experiencing negative emotion at the time of an event can lead to enhanced memory (Porter & Peace, 2007). It is possible that this contradiction in memory for homicide is related to a perceived fragmentation of memories, particularly common in those who tend to dissociate, such that they may believe they do not remember fully, despite objective measures showing that this is unlikely to be the case. One strength of this study was its use of both subjective and objective measures of amnesia, however researchers were unable to analyse the accuracy of participants' descriptions of events.

Much of the research conducted into the impact of committing homicide to date has focused on the prevalence of PTSD and amnesia, rather than considering a variety of factors that may contribute to this. There has also been a relatively narrow focus, with PTSD and amnesia drawing much of the attention and little research into other ways in which people may be affected by their actions. With the exception of the qualitative research by Ferrito, Vetere, Adshead and Moore (2012),

none was found that addressed more broadly, or in an explorative manner, consequences of criminally killing other than PTSD or amnesia.

The theory of moral injury

Litz et al. (2009) developed a model of the impact of killing in combat that may also apply to police officers and criminals. They coined the term 'moral injury' to define the impact of perpetrating, witnessing or allowing to happen, an action that contravenes deeply held moral beliefs and expectations. Their model is shown in Figure 1 below. It suggests that the initial trigger to potential moral injury is a transgression that violates the individual's moral code, causing dissonance and conflict with deeply held beliefs. If the individual then makes global and stable attributions about this dissonant action and feels shame, guilt and anxiety related to it, they may withdraw and feel unable to forgive themselves for it or reconcile the action. The impact of this failure in reconciliation may include avoidance, emotional numbness and re-experiencing, similar to some experiences associated with diagnosis of PTSD. Individuals may also begin to harm themselves, to sabotage themselves or to feel hopeless, confused or self-loathing. A proneness to feeling shame may contribute to the likelihood of experiencing moral injury, whilst beliefs that the world is just may help to prevent this. It is possible that this model could explain some of the conflicting evidence regarding the impact of killing, as the studies described in this review did not assess whether the perpetrator was suffering a moral injury as defined by Litz et al. If some people feel dissonance caused by their actions and are unable to reconcile this dissonance, they may be more likely to experience negative consequences related to the action of killing. This model may help to explain the differing psychological consequences for perpetrators of fatal violence, as well as the similarities across contexts discussed in this review.

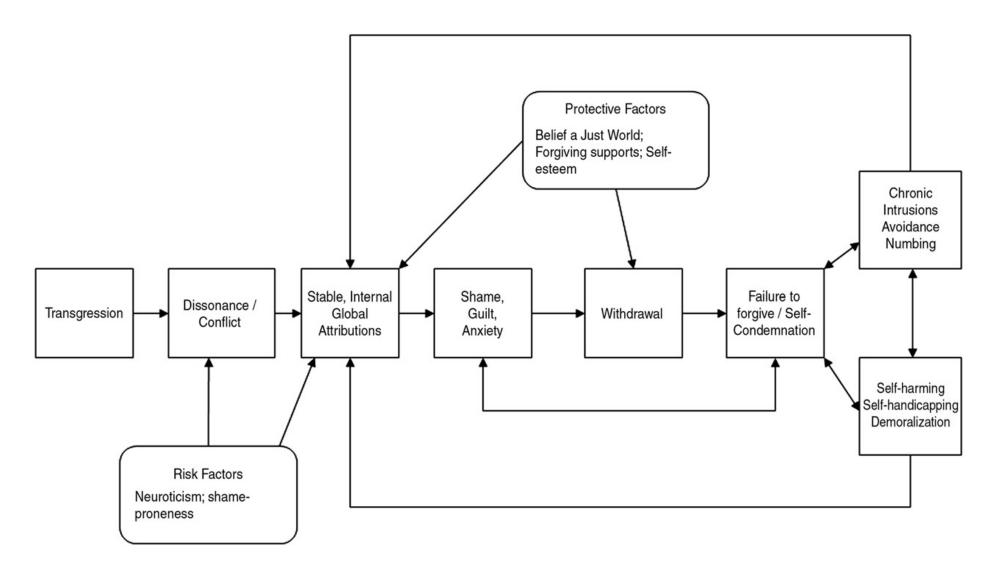


Figure 1. Working causal framework for moral injury by Litz et al. (2009)

Discussion

The research discussed in this review has explored the impact of killing another in a range of different contexts. Despite the variation in circumstances, the emotional consequences of taking a life appear to be similarly distressing. Research relating to members of the armed forces, police officers and those who commit criminal violence has suggested that each of these groups of individuals may be at risk of experiences associated with PTSD as a result of killing (MacNair, 2002; Marzella, 2001; Papanastassiou, Waldron, Boyle & Chesterman, 2004). Evidence has suggested that these difficulties may include re-experiencing the event, sleep disturbance and hypervigilance. Pollock's (1999) conclusion that offenders who perpetrate reactive violence may be more likely to experience PTSD than those who committed instrumental violence may also be relevant to members of the armed forces and police officers. It is likely that the majority of police officer-perpetrated killings are reactive, in response to a threat to themselves or others. Whilst the officers will have received relevant training and been aware that there was the potential for such an incident to occur, the action itself is likely to be unexpected and unplanned. Whilst this distinction may be less clear with regard to members of the armed forces, it is possible that many acts of killing in combat are also reactive, in response to fear for one's own life or anger at having seen comrades injured. In order to develop understanding of the distinction between reactive and instrumental violence in the armed forces or police force, and the associated consequences, further research would need to explore the situation in which killing occurred.

A number of other potential consequences have also been suggested with regard to the impact of killing in combat, such as changes in alcohol use (Russell et al., 2014) and degree of religious faith (Fontana and Rosenheck, 2004), though no research has yet investigated whether these findings would be replicated across the police or criminal contexts. There has been increasing research regarding the potential for perpetrators of homicide to experience amnesia of the event (Pyszora, Barker & Kopelman, 2003), though this is a complex and contentious area as amnesia may be used as a legal defence or be construed as a process of minimisation or denial. Whilst some anecdotal mention is

made of police officers either having very detailed or conversely, unclear, memories of killing, there is not sufficient evidence to compare these findings to the homicide literature.

One area for further research may be to explore why some individuals suffer more greatly than others. It is possible that differences between the circumstances of killing influence the psychological consequences. For example, the actions of police officers and members of the armed forces are legally, and often socially, sanctioned and even admired. As a result, there may be a lesser degree of stigmatisation associated with their actions in comparison to those who commit homicide. In general, killing as a criminal act is socially abhorred and often associated with significant punishment, though in the case of some pro-criminal groups such as gangs, or in some prison cultures, acts of serious violence can be associated with elevated status amongst peers. It may therefore be of interest for future research to compare the impact of criminal killing by those who have been part of a pro-criminal culture and those who have been part of a pro-social culture.

It is also possible that the perpetrator's own moral beliefs impact upon the response to their actions. Those who choose to serve in the armed forces have likely considered the possibility that they will kill and may have reconciled this with their own moral code, perhaps by reassuring themselves that their actions would be in the defence of others. Similarly those who join the police force may believe that they are acting to protect others. However, in both of these instances, it is possible that individuals felt justified and comfortable with the hypothetical idea of killing but that this was not true upon commission of the act. In the case of perpetrators of homicide it may be more difficult to hypothesise with regards to their moral beliefs related to killing. It is likely that some members of this group hold criminal attitudes that condone the use of violence, even when it is fatal, and may therefore be less likely to experience a 'moral injury' (as defined by Litz et al., 2009) and associated distress subsequent to their offence. It is possible that for some individuals there is a sense of elevated status associated with having committed violent offences, or a feeling that they were 'morally' justified in their actions. Attitudes such as these would likely result in fewer or different psychological consequences than those discussed in this review. Conversely, those who commit homicide having

lived non-violent, pro-social lives prior to killing may be more likely to have difficulty in reconciling their actions and their beliefs and may, therefore, be more likely to experience significant distress.

It is also possible that the presence, or absence, of mental illness at the time of the offence may be associated with varied consequences. The societal response to those who are deemed to have been unwell at the time of their violence is often complex, including both compassion but also a sense of stigmatisation and fear regarding the risk that they present. There are frequently practical differences in the aftermath of committing violence dependent on the presence, or absence, of mental illness, such as admission to hospital where someone may be supported with the psychological consequences of their offence to a greater extent than in prison.

It is clear that there are numerous reasons why some individuals may suffer distressing consequences as a result of killing. Whilst the literature in each of the different contexts reviewed here has continued to grow, it would be useful for future research to consider the broader concept of killing and the common factors that may increase risk of subsequent distress.

Clinical implications

There are several clinical implications arising from the literature described in this review. Firstly, the potential for those who kill in any context to experience negative psychological consequences of their actions should be considered in the process of any psychological assessment. Evidence suggesting a link between killing and suicidality (Maguen et al., 2012) emphasises the importance of this assessment. In the case of trauma, or other emotional distress, it is possible that the most appropriate intervention would differ depending on whether the individual had been a victim or a perpetrator in the traumatic incident. Secondly, the perpetrator's beliefs regarding their actions, with particular reference to beliefs about their morality and justifiability, may play a key role in the way that they are affected. Thirdly, it may be important to consider the societal perspective of their actions and any potential stigma, real or perceived, attached to the incident. Dependent on the context in which they killed someone, individuals may be offered support and compassion (e.g. in the case of a police officer who killed someone who was threatening others) or be made to feel judged and

punished (e.g. in the case of homicide), the latter of which may make it difficult for them to openly discuss their own responses to their actions. Whilst it is rightly expected that those who kill criminally should feel remorse for their actions, it may be important to consider how the response of society can impact upon their rehabilitation and recovery, perhaps preventing their risk of reoffending from being successfully addressed.

If the moral beliefs of the perpetrator have the potential to impact upon the psychological difficulties they experience as a result of their actions, then one particular group of homicide perpetrators may be most vulnerable. Those who have lived non-violent, pro-social lives up to the point of committing fatal, potentially reactive, violence may have deeply-held beliefs that are inconsistent with their offence. If this is the case, then they are likely to face condemnation not only from society but also from themselves, thus increasing the likelihood that they may suffer significant distress. As such, further research is needed to better understand the psychological consequences of committing violence for those who commit a single 'out of character' violent offence, in the context of having led a previously pro-social life with no history of serious violence.

Limitations of this review

One significant limitation of this review is that in order to consider the broad spectrum of circumstances and contexts in which an individual might kill another person it was not possible to include all of the research findings. Instead, this review has attempted to provide a synthesis of the literature related to the impact of killing and presented a model of thinking about this that may be clinically helpful (Litz et al., 2009). Understanding the impact that dissonance between deeply-held beliefs and violent actions may have on the quality and severity of consequent distress experienced is likely to be particularly helpful when working with individuals for whom this is the case. However, this model may be less clinically useful in considering the experiences of some individuals who have a long history of violent behaviour associated with perceptions of elevated status and increases in self-esteem, for whom the act of violence is less likely to have been associated with a 'moral injury'.

Another possible limitation of this review is the extent to which the amount of literature presented varies across the three contexts, i.e. killing as a member of the armed forces, in the line of duty as a police officer or as a criminal act. However, this difference is reflective of the amount of available research in each area. As in any narrative review, there is potential for bias on the part of the author, although attempts were made to counter this by ensuring that all of the different potential psychological impacts that are discussed in the literature are represented, with greater weight given to those that are more fully researched.

Conclusions

The available literature regarding the psychological and emotional sequelae of killing suggests a range of potential distressing consequences. Whilst this body of research is expanding, understanding is still lacking, particularly regarding killing as a police officer or as an act of homicide. It is possible that the likelihood and severity of distress is affected by the extent to which the individual is able to reconcile their violent actions with relevant deeply-held beliefs. If this is the case, it is possible that individuals who kill in the context of a criminal act, and who have no prior history of behaving violently, having lived pro-social lives until the point of killing, may be at particular risk of suffering significant distress consequent to their actions.

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Chapter 2: Empirical paper

The psychological impact of committing a single violent offence with no known history of violence: A study within secure services

Janet Evans

Abstract

Background: Previous research investigating the psychological consequences, for the perpetrator, of committing illegal violence has predominantly focused upon post-traumatic stress disorder and amnesia. To the author's knowledge, none has addressed the psychological consequences specifically of committing a single, 'out of character' act of serious criminal violence. This exploratory research attempted to gain a greater understanding of the broader psychological sequelae of committing a single act of serious violence.

Method: Semi-structured interviews were conducted with six men detained within high secure services following an act of serious violence, with no history of serious violence prior to this. Interviews were analysed using interpretative phenomenological analysis.

Results: A total of six themes were identified that were relevant to all participants; 'understanding the offence as not solely his responsibility', 'everybody has suffered because of his offence', 'loss', 'he is different, both by internal comparison and external comparison', 'the offence is ever-present, both in his own mind and in the minds of others' and 'recovery – moving forward from the offence and mental illness'. One further theme was retained due to its significance for one individual and the extent to which it diverged from the rest of the findings; 'the offence has had positive results'.

Conclusions: Participants had experienced a range of psychological sequelae to their offences, predominantly associated with significant distress. However, there was also a more optimistic sense that they could recover from this and move toward a better future. Results are discussed in the context of previous research and with regard to clinical implications.

Introduction

When a serious act of criminal violence occurs, it is widely accepted that the victim may experience a range of difficult psychological consequences including, but not limited to, increased feelings of fear, alienation and depression, post-traumatic stress symptoms (Norris, Kaniasty, & Thompson, 1997), confusion, apathy and a feeling of lacking control (Acierno, Kilpatrick & Resnick, 1999). What is less often considered in society, perhaps due to an understandable reluctance to feel sympathy for those who have injured others, is the possibility that the individual who committed the violence may also be affected. Some limited research has investigated this issue.

Papanastassiou, Waldron, Boyle and Chesterman (2004) assessed the prevalence of post-traumatic stress disorder (PTSD) consequent to killing another person in a sample of participants detained in a secure service with a diagnosis of mental illness, all of whom reported experiencing their offence as traumatic. The researchers found that 58% of the participants would have met the criteria for a diagnosis of PTSD at some point since their offence, whilst a further 21% would have met the criteria for partial PTSD. All participants who had killed a member of their own family or their partner (63% of the sample) met the criteria at least for partial PTSD, with two thirds of this group experiencing full PTSD. Furthermore, Papanastassiou et al. reported that those who had not experienced adverse events in early life (defined as early separation from parents, sexual abuse, physical abuse and/or victimisation) were more likely to develop PTSD related to their offence. It is a limitation of this research that only 19 individuals participated and further investigation with larger numbers of participants is needed. Gray et al. (2003) found greater levels of offence-related PTSD in individuals who had committed violent rather than sexual offences, as well as in those who reported feeling regret for their offence.

Crisford, Dare and Evangeli (2008) found that higher levels of offence-related guilt cognitions were associated with higher levels of offence-related PTSD in violent offenders in a secure service. This was still the case after variance related to severity of offence was accounted for. Those whose offence was against an unknown victim had significantly higher levels of guilt cognitions than

those who had known the victim. However, there were more sexually violent offenders with an unknown victim than a known victim, so it may be the case that this difference in type of offence mediated the difference in levels of guilt. It is also possible that those with a known victim felt more able to justify their actions than those who had behaved violently to a stranger.

Evans, Ehlers, Mezey and Clark (2007) reported that 46% of 105 young offenders who had killed or seriously injured someone experienced intrusive memories of their offence, whilst 6% met the criteria for a diagnosis of PTSD. Those who experienced intrusive memories, compared to those who did not, were found to have a lesser degree of antisocial beliefs prior to their offences and greater intensity of helplessness, fear and dissociation during their offences. This may suggest that the comparatively pro-social individuals had greater difficulty coming to terms with their offences than their more anti-social counterparts.

Pyszora, Fahy and Kopelman (2014) explored the presence of amnesia in a group of violent offenders and found that 90% of those who experienced amnesia had committed homicide. The authors also reported that those who experienced amnesia were significantly more likely to have committed a crime of passion – defined as killing someone important to them whilst in an emotionally aroused state – than those who did not experience amnesia. This may suggest that those who committed more extreme violence, or whose violence was reactive and a function of extreme emotions, were more distressed by, and suffered more significant consequences of, their actions.

Evans, Mezey and Ehlers (2009) found that 19% of 105 young offenders convicted of violent crimes reported experiencing partial amnesia of the incident, whilst only 1% reported complete amnesia. Memory gaps were often brief and tended to correspond to the most violent part of the assault. Of the individuals who reported amnesia and had used a weapon in their offence, 50% could not remember using the weapon, despite remembering other aspects of the assault. Those with amnesia were also significantly more likely to report that they had lost control at the time of their offence. The idea of offence-related memory loss, however, is contentious and is often argued to

reflect attempts to deny offending behaviour. It is possible that the association between more extreme violence and memory loss is, in part, the result of a tendency to minimise severity.

Much of this research has evaluated specific consequences of violence. To the author's knowledge, there has been no research that allowed for a broader consideration of the psychological sequelae, as identified by those who had committed the offence. The current research aimed to fill this gap by using qualitative methodology to conduct an exploratory investigation of the ways in which individuals who committed criminal violence were affected by their actions. More specifically, this research focused on individuals who had committed a single serious act of illegal violence without any history of prior serious violence. The impact on this specific group of individuals was severely under-researched, and it was thought possible that those who had lived non-violent and largely pro-social lives prior to their offence may experience their actions as inconsistent with their self-image, beliefs and attitudes, finding it difficult to integrate these and perhaps suffering greater consequent distress. Conversely, individuals who have committed repeated violence as part of a consistent or escalating pattern of behaviour may have developed permission-giving beliefs about the acceptability of violence that protect against distress.

The emotional impact of committing criminal violence may be compared with legitimised violence. Litz et al. (2009) considered the impact of killing on members of the armed forces and suggested that individuals become distressed if they experience a 'moral injury' whereby they are unable to reconcile the act of violence with deeply-held moral beliefs. It is conceivable that individuals who have no significant prior history of violence may hold beliefs that are more difficult to reconcile, when compared to repeated violent offenders, potentially making them more likely to experience a 'moral injury' and subsequent distress. As described above, Evans, Ehlers, Mezey and Clark (2007) found that those who experienced intrusive memories of their offence had fewer antisocial beliefs prior to their offence, perhaps supporting the idea that committing criminal violence in the context of a previously pro-social life may be associated with significant distress.

The aim of this research was to explore the psychological impact, upon the offender, of committing a single act of serious violence that was 'out of character' due to an absence of serious prior violence. Serious violence was defined as murder, manslaughter, attempted murder or grievous bodily harm. The research objectives were to explore (a) the psychological and emotional impact of the individual's violence with respect to self and others, (b) how participants 'made sense of' the reasons for the violent episode, (c) how participants managed any psychological difficulties arising from their offence and (d) how the offence impacted upon their perception of 'self'.

Design and methodology

The aim of this study was to explore participants' experiences in relation to the research question, considering the meaning they have made of these. Due to the lack of research in this area, a qualitative and exploratory design was chosen to further understanding.

Interpretative phenomenological analysis (IPA) attempts to understand the significant experiences of individuals and how they have attached meaning to these (phenomenology). It attempts to interpret these meanings (hermeneutic theory) whilst maintaining a focus on the meaning for each individual (idiography), rather than endeavouring to generate a more universal understanding (Smith, Flowers & Larkin, 2009). IPA lends itself to the exploratory nature of this research as it provides rich accounts of the experiences of participants. IPA was chosen over other qualitative methodologies due to the desire to explore, in depth, the ways in which a small number of people who are 'experts' in a particular phenomenon (i.e. the participants) have made sense of their experience. The use of grounded theory was considered but rejected as the aim of the research was to understand the experiences of a small group of individuals who had committed a single violent offence, rather than to develop a model of the impact of committing violence. Thematic analysis was also considered but it was anticipated that IPA would provide a more in-depth analysis of the small data set. IPA was chosen over discourse analysis because of the focus on how participants have made sense of their experiences, rather than on how they have constructed their account of events.

Ethical approval

Approval was received from the NHS Research Ethics Committee (received 26th September 2014), the Trust Research and Development department, the research committee of the Doctorate in Clinical Psychology department at the University of Liverpool and the research committee of the secure service from which participants were recruited. Ethical issues were discussed in the participant information sheet and it was made clear to participants that confidentiality could not be maintained subject to any concerns relating to the safety of participants or others, or the disclosure of previous, serious, unreported criminal acts.

Participants

Purposive sampling was used in accordance with IPA's focus upon the understanding of a particular experience common across participants (Smith & Osborne, 2008). IPA does not attempt to make generalised statements or provide a representative picture, so this method of sampling was appropriate to this research. In order to gather sufficient data, whilst also allowing for significant depth of analysis, six participants were interviewed, in line with the recommendation of Smith, Flowers and Larkin (2009). The need for homogeneity was considered in supervision and it was agreed that recruiting individuals detained within high secure services using the inclusion and exclusion criteria described below, provided an acceptable level of homogeneity.

All but one of the participants were Caucasian, the other African, and all were aged between 30 and 53 years. The mean age was 39 years. Five participants were convicted of manslaughter with diminished responsibility and the sixth was convicted of murder. In order to maintain confidentiality and prevent recognition from previous media coverage, limited detail is provided regarding participants' offences. The duration between offence and interview ranged from two years and four months to thirteen years and three months; the mean length was approximately eight years and nine months.

Inclusion and exclusion criteria

The following participant inclusion criteria were used: individuals who had committed a serious violent offence (murder, attempted murder, manslaughter or grievous bodily harm), who had no record of having committed prior serious violence, for whom the offence was 'out of character' based on clinical judgment and participant self-report, and who were anticipated to not be adversely affected by taking part. The following exclusion criteria were used: those who had committed an act of serious violence prior to their index offence, those who had committed a violent sexual offence (in order to maintain homogeneity), those with a diagnosis of psychopathy (due to potential for deceptive self-reporting and undisclosed previous offences, based on the criteria used to define psychopathy) and those whom staff anticipated would not be able to provide a coherent account of their experiences.

Recruitment

Participants were identified within a high secure service in England. Staff within the service were provided with information about the research and asked to consider whether any individuals in their care met the criteria. Permission was obtained from the Responsible Clinician of each potential participant, following which the potential participants were approached and provided information about the research to consider, before being offered the opportunity to take part one week later. For participants who agreed to do so, written consent was obtained and clinical records were scrutinised to ensure they met the inclusion criteria. A total of six participants were interviewed. One additional individual consented to take part but was not deemed to meet the inclusion criteria.

Interviews

The interviews were semi-structured to allow flexibility with each participant (Smith, 1995). This is a commonly used approach in phenomenological research, allowing for individuals experiences of each participant to be explored, in comparison to the inflexible questioning of a structured interview (Smith & Osborn, 2008). The interview schedule was designed in consultation with supervisors, both of whom had clinical experience with individuals who had committed violence.

It was reviewed by two trainee clinical psychologists for repetition, comprehensibility and the extent to which it met the aims of the research. A practice interview was conducted with one of these trainees to ensure adequate flow. The final interview schedule asked participants to discuss: their experiences since the offence, the psychological and emotional impact of their actions, the impact on their life and anticipated future, the impact on others, the ways in which they had made sense of their offence and their beliefs regarding the reasons that it occurred, how they had coped with any difficulties, and how they viewed themselves, and perceived others to view them, since their offence, in comparison to before. The interview schedule was reviewed after the first participant, with sight of the interview transcript, resulting in one additional prompt but no significant changes. Interviews were recorded with a digital recording device provided by the service, consistent with their security procedures. Interviews lasted between 48 and 107 minutes. Demographic information and details regarding participants' offences were gathered from their clinical notes, with the permission of participants and their Responsible Clinician. The majority of this information was obtained subsequent to the interview to prevent bias. Two of the interviews were transcribed by the researcher in order to aid immersion in the data, whilst the others were transcribed by administrative staff within the service in line with security procedures. All transcripts were made anonymous by the researcher by removing any identifying details.

Analysis

The steps taken in the analysis were based on the suggestions of Smith, Flowers and Larkin (2009) and are described below. For each individual interview:

- The transcript was read a number of times in order to become immersed in the data and familiar with the participant's experience
- The transcript was examined and initially coded on a descriptive, linguistic and conceptual level. The descriptive level considered the basic content of the interview, the linguistic level looked for features of language use such as metaphor and

- repetition as well as non-verbal features such as pauses or speech interruptions, whilst at the conceptual level initial interpretations of the data were developed.
- Based on both the transcript and this initial coding, a set of emergent themes was developed.
- 4. The emergent themes were then clustered into themes and superordinate themes that seemed to reflect conceptual connections.

The superordinate themes and themes were then compared across the full sample, looking for similarities, differences and patterns, clustering further to produce a set of themes that represented the group.

Quality checking of analysis

To ensure the quality of analysis, exploratory coding and generation of emergent themes for two interviews, as well as clustering of themes into superordinate themes for three interviews, were reviewed by clinical or academic supervisors. The final development of themes across participants was reviewed by both clinical and academic supervisors.

Reflexivity

Researchers using IPA attempt to understand the experiences of participants within the context of their own world. They do not have first-hand knowledge of events and instead are presented with the participant's interpretation, which they attempt to understand from the perspective of their own world view. As such, the researcher attempts to understand the way that a participant has understood an experience. It is inevitable that personal experiences and preconceptions are brought to bear when conducting research. To prevent this from leading to bias or misinterpretation in either the collection or analysis of data, active engagement in a process of reflexivity is important. Reflexivity refers to the act of turning attention inwards, considering personal experience and understanding of the considered phenomenon. This reflexivity enables the researcher to attempt to bracket any assumptions or preconceptions they hold, that could otherwise impact upon the research. As far as possible – though this can never be fully achieved – these are put to one side and the research is

approached with a phenomenological attitude, through which the researcher is open to the possibility of being surprised by the participant's interpretation of the phenomenon. This is a continuing and dynamic process, as attempts are made to bracket the understanding of one interview before proceeding to the next.

The position of the researcher

The researcher is a 28 year old female currently training to be a clinical psychologist. Prior to training, the researcher had worked in a number of forensic services. Here, she worked with an individual suffering significant distress as a result of committing a single violent offence, inconsistent with his self-image and values. Through this work the researcher became interested in the ways in which other individuals might be affected in a similar situation.

The researcher's prior experience involved working with an individual who presented as highly distressed by his offence, experiencing flashbacks, high levels of anxiety and other difficulties that might be associated with a diagnosis of post-traumatic stress disorder. As a result, it was important that she remained open to different experiences that might be described by participants. It was also the researcher's experience that many of the individuals detained in services having committed a single violent offence had been suffering from mental health problems at the time. However, the researcher reflected on this and was careful not to assume this would form part of the participants' understanding, regardless of the way in which professionals involved in their care might have made sense of the offence.

The researcher also considered the potential conflict between the dual role of researcher and clinician. It was crucial that the researcher changed her approach from that of a therapist to that of a researcher, both in the context of the interviews and in the analysis. This meant listening to participants' experiences in a manner that searched to understand the sense they had made of them, rather than working to find a collaborative understanding of events, as is the case in the development of a clinical formulation.

Results

The aim of this research was to explore the psychological and emotional consequences experienced as a result of committing a single, 'out of character' act of illegal violence. Analysis of the interviews led to the identification of six themes, all of which were relevant to every participant. A further theme that was significant to only one participant was also retained due to the importance it held for this individual and the extent to which it diverged from the rest of the findings. Sections of transcript providing support for interpretations are provided below in italic font. Pauses within speech, and their length, are denoted by [....], whilst ... is used to indicate where text was omitted to provide a relevant quote appropriate in length. Words within [] were added to provide clarity, 'P:' indicates words said by the participant whilst 'I:' indicates words said by the interviewer. One of the participants; Jack, features less prominently in the narrative of the results due to a lesser degree of richness in his account.

Understanding the offence as not solely his responsibility

This theme refers to the understanding that participants had developed of their offences. All of those who took part expressed ways of conceptualising their offences through which they accepted that they had committed the act of violence, but expressed a feeling that factors other than their own intention had played a part in causing it. The other factors that participants felt had contributed to their offences included mental illness, substance use, failure of services to provide care that could have prevented the act of violence, the actions of the victim, destiny and chance.

All but one participant referred to the role of mental illness in their violence. Jason reported hearing a voice at the time of his offence, which he believed was that of the victim granting him permission to attack her: "I heard her voice inside my mind telling me to kill her" (20, 348). This was in the context of a range of other difficult experiences associated with mental illness that had led Jason to feel as though he had no choice but to commit his offence as the only means of ridding himself of an unbearable illness: "the illness, I had to try and get rid of the illness, I was going mad, I was going insane, it hurt so much I had to get rid of it" (30, 529-531). Jason's repetition of the idea

that he "had" to act to be rid of this illness implies a perceived lack of choice, whilst his use of the term "the illness" suggests something physical and separate to himself that could be removed. Jason may have made sense of his offence as an act that felt necessary to protect himself from the danger of this painful external force.

Four participants expressed a feeling that they had been let down by services and that this had been a factor in causing their offence. The manner in which services had failed them varied between participants, but the pervasive sense was that if they had been provided with better care then perhaps the offence would not have happened.

James described feeling that, in the context of admission to a psychiatric hospital, it was the duty of staff to observe him and if they had met this obligation he would not have been able to commit his offence: "My [.] idea is that if there was somebody there this wouldn't have happened. [inaudible] They should have observed me, very close, especially a new patient. [..] I blame them really, I certainly blame them for what happened." (32, 562-566). There was an implication that staff were at least partly to blame as they should have known that those in the service, particularly those recently admitted, could be dangerous and should therefore have been actively engaged in preventing incidents such as his offence. This perception of dangerousness seemed to be strongly linked to mental illness, with James later suggesting that "mental illness is a very [...] dangerous illness" (45, 807-808).

Craig described stopping his medication on the advice of a doctor. Whilst Craig was glad to be rid of medication from his life, he suggested that had he continued to take it then his offence might not have happened: "I should have been kept on them, the inconvenience of taking the medication was, is trivial compared to you know, the way things can go wrong when you are not on medication" (26, 451-454). Craig seemed to assign himself quite a passive role in stopping his medication, deferring to the judgment of professionals who made the wrong decision. Whilst stating that he should not have sped up the process of cessation, Craig seemed to feel that his fate was sealed and negative consequences were inevitable as soon as the doctor suggested he no longer needed medication: "That

was a silly thing to do but you know I am not a medical professional and the fact that he said I could come off it, I thought does it really make any difference if I come off it now or in a year's time, erm, I don't think it would have made any difference, I think if I had stayed on it a big longer and come off it, things still probably would have gone wrong" (25, 443-448). Craig's assertion that he is not a medical professional implies that he had trusted an expert and should have been able to do so; it was the responsibility of the doctor to know the best course of action and he should have been safe to do as he was advised.

Mike's conceptualisation of his offence was in many ways different from the majority of the participants', with the idea of destiny holding the most significance. He believed that his offence was "meant to be" (64, 879), based on the notion that it had been predicted by many people over the course of a number of years. Mike understood his offence as bigger than himself, suggesting that "it was destined to happen so maybe it could be regarded as an act of god" (81, 1110-1112). This suggests that Mike's understanding of his offence may involve a kind of passivity on his part, following a path that had already been laid out and over which he had no control.

Everybody has suffered because of his offence

This theme refers to participants' understanding that every person who was involved in the offence has suffered. Across the interviews it was suggested that the participants, their families and partners, the victims' families and those victims who did not die all suffered significantly, as a direct result of the offence and/or as a result of consequences such as the participants' detention. There was also a sense that some participants' suffering was increased by knowledge of the suffering they had caused others.

Jason described being taken from his childhood home at a young age and placed into a cold and uncaring system (prison) that forced him to grow up very quickly, separating him from his family and previous life: "I was still a kid when I did my offence so [...] I went from home to a secluded environment, very cut off from life, very incarcerated" (3, 51 – 4, 53). There was a sense that he was a child who had been thrown into an adult system that caused him significant suffering to the extent that

he attempted to take his life rather than live out his sentence: "It has nearly killed me already so it does a good job of smashing the shit out of you, look, I have self-harmed and everything. I'm just showing you my arm at the moment with my cuts on it and they are quite deep cuts. That is because I don't want to do this sentence" (28, 499 – 29, 503). It seemed that Jason may have shown his scars to the researcher, as opposed to simply stating what he had done, as a means of emphasising how strongly he had wanted to die and how terrible his experience of the system was.

Craig described the almost overwhelming emotional impact that his actions had on him as "a great darkness and depression like a great black cloud over me a lot of the time" (5, 82-83) that he could not escape even in his sleep due to frequent nightmares. The powerful imagery of the "great black cloud" metaphor suggests a heavy and oppressive presence weighing down on him. However, it seemed important to Craig to emphasise that he believed the families of the victims had suffered to a greater extent, often making comments to this effect when discussing his own pain. It seemed that Craig's willingness to acknowledge the emotional impact on himself was dependent on concurrent recognition of a greater impact on the victims, perhaps because of guilt that he caused their suffering: "it is just the guilt over what I have done basically erm feeling sorry for the victims [...] the pain they have gone through, the loss for the family of the one person who sadly passed away as a result of what I did" (6, 92-95).

Tom described a significant impact on his own family, although it seemed that he was somewhat uncertain about the details of this, as though they had chosen not to share the full extent of their suffering with him:

"I get the impression my mum was in bed for six months after [laughing] after I was arrested and after the incident, the index offence, she also went to the doctors and was put on medication, I heard [...] that my sister on the day of the arrest she saw me in the Echo, the front page of the Echo, she started crying so I think I have hurt them and upset them quite a bit

I: And what does that mean to you then?

P: [.....] Well it hurts me to think I have hurt them. [....] When you commit an offence the last thing you think about is the people around you, your own family" (11, 179-189).

It seems that Tom did not have any intention to hurt his family through his actions and in fact had no awareness or consideration of them at the time of his offence, focusing solely on achieving his goal. His laughter when describing the impact on his mother was not callous, but perhaps reflected a feeling of discomfort in considering the pain that he had caused her and the guilt and regret he felt to have done so.

Loss

A prominent concept across all participants was the loss they had experienced because of their offence, affecting many aspects of their lives. This included loss of liberty, control, privacy, the future they had hoped and planned for, important people from their lives, status and respect. Loss was also reflected in the experiences of the victims' families and the participants' own families. The concept of loss varied in how it manifested for each participant, but was pervasive across all of the interviews. Given that all participants' offences involved at least one death, a theme related to loss might seem unsurprising. However, this theme reflected multiple losses suffered by the participants, encompassing many things other than the loss of those who died. It seems that this concept of loss for the participants may have mirrored the loss likely experienced by the victims' families, exacerbated by the justice system, the responses of others and the perceptions of society.

Jack described the loss of his family from his everyday life; although they maintained positive relationships, these were limited by the restrictions of the service. It seemed that Jack felt he was being deprived of his rightful place amongst his family, that his family were similarly suffering the loss of him and that for their sake he should be allowed to return to them: "with me being, with me being in this place, y'know, a family is supposed to be together" (11, 190-191). Jack also seemed to feel that he was losing time whilst in hospital, as though it was passing him by and he should not have to lose any more of his life to his offence: "I've done all my time, I've done my bird now d'ya know what I mean so ... I think I deserve to be let out now" (35, 625-628). It seemed that Jack felt as though

he had paid the debt he owed, and that he may have felt a sense of unfairness that he was detained past the point that he had expected to be released.

Mike's sense of loss centred primarily on the loss of control and freedom from his life, being forced to rely on powerful others rather than being able to exercise independence: "I've told the doctor well look the balls not in my court. You the person who's [.] determines what is going to happen in my life" (45, 608-610). There was a sense that by relinquishing control and accepting his lack of power, he was able to cope with the situation in which he found himself. This may reflect an attempt by Mike to take back some semblance of control, by actively choosing to relinquish it rather than perceiving it to have been taken from him.

Tom referred to the loss of his position in society: "now I am part of the lowest group of people in society" (35, 619-620) and of the part of himself that had earned his previous position: "I feel like I have lost part of myself whereas when I was a good citizen, I was whole, now I feel like part of me is missing, I have a black stain on my character" (35, 522-525). It seemed as though Tom had lost his identity as a moral and upstanding member of society, both in terms of how he saw himself and in how he perceived himself to be seen by others. The metaphor of "a black stain" suggests that he felt marked by his offence, by a physical manifestation that others would be able to see and that would be impossible to remove.

He is a different person, both by internal comparison and external comparison

This theme refers to a sense that the participants perceived themselves to be different, both in comparison to themselves at other times in their lives, and to their peers. The participants' understanding of themselves included the idea that they had been changed fundamentally by their offences, as well as in the time since the offence, but not because of it. There was also a sense of having been a different person at the time that the offence was committed, compared to the real self. Finally, participants expressed a feeling that they were not the same as their peers, either within the service or in the community.

Whilst Jason did not perceive his offence to have changed him as a person, he did suggest that he was very different at the time of his offence, implying that he had become someone else for a period but has now returned to his true self: "it's like fucking hell the kid was ill when he did what he did, he's a mental patient." (19, 335-337). The use of the third person to describe himself when he committed his offence emphasises the distance between Jason now and at that time. This separation may help Jason to integrate his offence into the narrative of his life, not as a part of him but as something that he did when he was briefly a changed person. It is also implied that Jason committed his offence when he was a child, whereas now he is an adult, suggesting that he has since grown up significantly. Similarly, Jack described feeling as though he had matured significantly in the time since his offence, though not because of it.

James described feeling that he had changed significantly as a result of his offence:

"Yes because before my offence [.] there was no such kind of thinking you know? [Inaudible] I was a different person at that time ... But after the er offence, every movement now [.] attracts my attention. I am being over-vigilant you know? ... Everything now makes me worried. [Inaudible] All these things [..] there is suspicion in my mind you know, [..] I became very suspicious, full of suspicion because of that, because of the offence." (42, 739-751).

It seemed that James' perception of the world and those around him changed because of his offence, so that he is now continually suspicious. The idea of being "full of suspicion" implies that he is consumed by it. This sense of a change in his mind and in his way of thinking seemed to cause James significant distress.

Conversely, Tom described a perception that he had been changed for the better both by his offence and by its consequences: "I think it has made me appreciate life a bit more so it has made me more of a positive person psychologically [..] and look forward to things a bit more erm [............] I tend to seek out new experiences a bit more" (6, 90-94). This was a very different experience to that described by the rest of the participants and may reflect Tom's negative perception of who he was before his offence, so that it acted as a catalyst for positive change. Tom also seemed to view himself

as different to the other people within the service: "They are not really the sort of people I would mix with" (25, 437). This may reflect his perception that, with the exception of his offence, he had been a moral and upstanding member of society and was therefore not like the majority of people within secure services, who may have committed multiple offences.

The offence is ever-present, both in his own mind and in the minds of others

This theme refers to the idea that the offence was ever-present in the lives of the participants. This was reflected in both their own awareness of the offence and their understanding of the place it held in the minds of others. The feeling that the offence was ever-present for the participants themselves reflected a sense that it was never far from their minds and they expected to carry it with them for the rest of their lives. It was also the case that some of the participants reported being asked to repeatedly tell the story of their offence by others. The presence of the offence in the minds of others involved the idea that all of the participants felt judged and defined by others based on their offence.

Craig described feeling that he was able to temporarily distract himself from thoughts of his offence but that this never lasted for long: "I mean you do have periods where you, when you are not thinking about, when I am not thinking about what I have done where I am distracted but then my mind will come back to the reality of what I have done." (17, 287-290). This suggests that, for Craig, his offence is his reality and any time spent not thinking about it is an escape from that reality. The switch from speaking in the third person to speaking in the first may indicate Craig initially talking in more general terms and then changing to talk more specifically about himself, perhaps mirroring his description of being able to push the offence away momentarily, but it always coming back to him. James suggested that "people never stop coming and talking about [his offence]. They consider as a very serious criminal [..] so all that things is very difficult, makes me very frustrated and it makes me lack [..] lack self-confidence" (10, 166-169). It seemed that he felt as though he was not being allowed to move on from his offence because of other people's continuous emphasis on it, as though

his offence was given higher priority than anything else and this prevented him from recovering or regaining his self-confidence.

Mike suggested that his offence constantly affected the way that other people perceived him, such that it significantly changed the type of person that he was judged to be: "the thing is that lots of persons probably see me as [.] being dangerous. [.] I'm not dangerous to anybody." (93, 1276-1278). There was a sense that people misjudged him because of his offence; rather than seeing the whole person they made assumptions based solely on what he did, which Mike felt were not an accurate representation. It seemed that Mike felt powerless to prevent people from perceiving him in this way, as though no matter what he did, his offence would always overshadow him in the eyes of others: "if you look at what did he do you'd answer say well I'm a murderer. [..] That's [.] I can't do anything about it, that's your [.] interpretation" (100, 1371-1374). The use of the word "interpretation" implies that this is the individual's understanding, rather than something that Mike holds to be true.

Recovery – moving forward from the offence and mental illness

This theme reflects the participants' understanding of moving forward towards the future. This encompassed ideas about their hopes for the future and working hard to achieve these, methods they had developed to help them cope with difficulties associated with the offence and/or mental illness, recovery from mental illness, coming to terms with the offence and acceptance of their current situation (though sometimes begrudgingly and as a means of 'playing the game' of the system to progress). Despite some concerns regarding the possibility of facing discrimination, this theme seemed more optimistic than the others and suggested that participants hoped for a life beyond their offence that might one day be achievable.

Jack spoke about attempting to keep himself busy and occupied as a way of coping with difficulties and, in the context of this, finding his vocation in life: "just like in the last two, three years I've found my passion [.] and that's bricklaying. And I focus on bricklaying" (6, 91-92). It seemed that Jack had moved from simply using activities as a means of distraction, to finding one that was meaningful to him and provided him with a sense of purpose that could be part of his future.

Jason suggested that he had accepted the situation he was in as a consequence of his offence, as he could not change this and therefore had no choice but to try and cope with it: "It's tough shit, you have got to get on with it, shit happens and you have just got to get on with it. You can't change your reality of life" (28, 488-490). There was a sense that he was forced into this somewhat begrudging acceptance, through an acknowledgement that he was not able to change anything. His repetition of "got to get on with it" implies a sense of having no choice but to try to live his life despite the difficulties he faced.

Craig described an active process of attempting to come to terms with his offence, as though this was something that he was consciously working towards and hoping to achieve: "it has just been a bit of an uphill struggle ever since doing what I did erm, to come to terms with what I actually did." (2, 24-26). The metaphor of the "uphill struggle" implies a tiring and effortful process, but may also suggest that it has an achievable end. This sense of actively engaging with coming to terms with his offence seems to represent an attempt to move towards a better future, in which he is able to live with what he has done, to accept it as part of his narrative and to suffer less distress as a result.

James talked about his hope that one day he would be able to leave services and have his life back: "Some day, one day, I can be cured, I can leave this hospital and I can have [.] my own life" (38, 676-677). There is an implication that he does not see this period of time as a part of his real life, as though his real life is waiting for him when he has recovered and is able to return to the community. The idea of being "cured" implies that he will leave mental illness behind him in the hospital and that it will not be part of the life he has when he is discharged. This part of James' interview seemed optimistic and hopeful for his future.

The offence has had positive results

The final theme was only represented in the interview of one participant. However, it is included due to the significance it had for this individual and the extent to which it diverges from the experiences of the majority of the participants. For Tom, there had been many positive consequences to his offence. His sense that he had changed for the better has already been discussed within the

theme 'He is a different person, both by internal comparison and external comparison'. However, this idea of positive consequences extended further. Tom referred to an improvement in his relationship with his mother, a belief that if it weren't for his offence his life would have been much worse, and finally the idea that even the difficult experiences resulting from his offence have helped him to grow:

It seems that Tom felt that he was stuck in the life he had before his offence and that only by doing something drastic was he able to escape. Words such as "dragged" and "forced", whilst often used to describe a negative experience, seem to represent having been forced out of a life that he did not want, providing him with an opportunity to have a better future. Tom did not suggest that this process was easy for him – the metaphor "baptism of fire" implies that he has gone through pain – however, he seemed to feel that it was through this difficulty that he was able to grow and move towards a better life.

Discussion

This research has explored the experiences of a group of individuals who have committed a single, 'out of character' act of serious criminal violence. Specifically, it has considered the psychological and emotional sequelae of their offence. Participants had made sense of their offences as not solely their responsibility, identifying other contributing factors such as mental illness and failure of services. They described feeling that everybody involved in the offence had suffered significantly. Loss played a prominent role in the participants' experiences, including loss of freedom, control, relationships and the life that they had expected and wanted for themselves. A theme also

emerged relating to a feeling of being different, both compared to a previous self, and compared to peers. Participants felt that their offences were ever-present, both in their own minds and in the way that they were judged and perceived by others. More optimistically, however, participants also talked about their experiences of recovery, including hopes for the future and a sense of working hard to achieve these, coming to terms with their offences and developing techniques to cope with the difficulties they faced. Finally, and with significant divergence to the rest of the results, one participant felt that much in his life had been improved by his offence. It seemed that, for this individual, the life he had prior to his offence was not one that he was happy with, and his offence was understood as a catalyst for change.

These findings differ somewhat from the majority of research into the impact on the perpetrator of violent offending. Previous research has tended to focus upon post-traumatic stress disorder (Gray et al., 2003; Papanastassiou, Waldron, Boyle & Chesterman, 2004) and amnesia (Evans, Mezey & Ehlers, 2009; Pyszora, Fahy & Kopelman, 2014) associated with violence. The present research did not ask specifically about either of these difficulties, but did attempt to capture more broadly those experiences that held significance for the participants. Neither amnesia nor symptoms of PTSD featured prominently in the interviews, with a range of other difficulties reported instead. Whilst limited experiences associated with PTSD were described by a small number of participants, there was no suggestion that they had made sense of the impact in this way, or that there had been any consideration of such a diagnosis by professionals involved in their care. No participant mentioned any memory loss related to their offence. It is possible that these experiences were less prominent here because they were not specifically asked about; had participants been asked to discuss their experiences of trauma or amnesia related to their offences then this may have featured to a greater extent. However, it also may be the case that much of the research addressing the consequences of committing violence is not capturing those sequelae that are the most important for these individuals.

There is evidence in the literature to support the idea that trauma can be cumulative, so that those who experience childhood adversity are at a greater risk of developing PTSD in response to

trauma later in life (Koenen, Moffitt, Poulton, Martin & Caspi, 2006). Data were not collected in this research regarding the participants' childhood experiences. However, given their pro-social lives prior to the violent offence, it may be reasonable to suggest that they experienced relatively stable childhoods, in comparison to the high prevalence of past trauma reported amongst the general prison population (Goff, Rose, Rose & Purves, 2007). If this is the case, then it may help to explain why PTSD seemed to play a less prevalent role here than the previous literature might suggest; if the participants had experienced a lesser degree of childhood adversity then they may have been less at risk of developing PTSD consequent to their offences. This contradicts Papanastassiou et al.'s (2004) finding that those who had not experienced early adversity were more likely to be traumatised by their offence. However, Papanastassiou et al. did not distinguish between patterns of offending. It is possible that repeat offenders who had suffered early adversity, and lived in a pro-criminal culture may have been more likely to believe their violence was acceptable and thus not traumatic.

It may be that the apparent lesser focus on PTSD in these findings compared to previous research related to the specific participant group; those whose violence was a single, 'out of character' act, rather than part of a pattern of repeated violence. This may mean that the participants in this research were different to those in the available literature, which does not generally distinguish the context in which the violence occurred. Litz et al.'s (2009) theory of moral injury suggests that when an individual is unable to reconcile their actions with strongly-held moral beliefs they are more likely to experience significant distress. It may have been expected that those who committed violence that contradicted a generally pro-social attitude would have difficulty reconciling their actions with their beliefs, resulting in a greater degree of associated trauma. Participants' understanding of their offence as not solely their responsibility may reflect an attempt to reconcile the violence with their pro-social beliefs. It is possible that making sense of their violence as something that was not fully in their control, and to which other factors also contributed, may have helped participants to integrate the events into their narratives in a way that was more acceptable to their world view. Based on clinical experience, it is not uncommon for individuals convicted of violent crimes and detained within secure services to assign some of the blame for their offence to external forces and/or mental illness, perhaps

as a means of minimisation or with the hope that this will expedite their discharge. However, in this case, it seemed that the attribution of responsibility elsewhere reflected genuine meaning-making on the part of the participants, perhaps as part of the process of coming to terms with their actions, as a genuine psychological defence, or as an accurate reflection of other contributing factors, rather than for any pragmatic benefit.

Participants seemed to hold their offences as somewhat separate to themselves, acknowledging that they committed the violence but viewing it as something they were only capable of in a specific context. It is possible that as a means of integrating their offences without causing their self-image to be irreparably altered or damaged, their narratives defined themselves as their 'real' self versus their 'unwell' self. With the exception of Mike, all participants reflected on their offence as having occurred in the context of significant mental illness. It seems that participants may have associated their violence with mental illness to the extent that they perceived a separation between the 'real' self – mentally well, non-violent, pro-social – and the 'unwell' self – dangerous and capable of serious violence. If this is the case, then this distinction may serve a protective function, as it implies that as long as the participants are able to remain in the role of their 'real' selves, then there is no danger of further violence and they are able to remain pro-social members of society.

What is clear from this research is that the psychological and emotional sequelae of committing an act of 'out of character' violence may be more complex than the relatively narrow focus of previous research addressing the consequences of violence. However, understanding of these consequences is still severely lacking. It is not clear whether the findings of the current research represent a potential difference in the impact of committing 'out of character' violence, as compared to repeated violence, or whether exploratory research into the impact of committing any type of violence would find a similarly complex picture.

Reflections on the process of this research

It was worthy of note that the offences of all participants in this research had resulted in at least one death, despite inclusion criteria stating only that participants should have committed an act of serious violence. It is possible that this reflected the degree of severity required for a single act of violence to result in admission to high secure services, or that these offences, by their extreme and somewhat unusual nature, were more prominent in the minds of the clinicians referring potential participants, than those involving grievous bodily harm.

The researcher experienced some difficulty in gaining permission to undertake this research in high secure services due to a misperception of the research committee that there would not be a sufficient number of individuals who had committed a serious violent offence without prior history of serious violence. This may reflect a lack of awareness of the number of individuals within services for whom this is their experience.

Clinical implications and further research

The clinical implications of this research relate to the understanding of this particular group of individuals, both in making sense of their offences and level of risk, and in considering appropriate treatment. Given the 'out of the blue' nature of these offences and the complexity of the participants' own understanding of the causes, it may be difficult for professionals to develop a comprehensive formulation of the factors involved in these individuals' risk. If this is the case, individuals such as the participants in this research may be detained in secure services for comparatively, and perhaps unnecessarily, longer periods than their peers due to caution on the part of professionals. The idea that failure on the part of services contributed to participants' offences was prominent in this research, and it is of concern that this potential for a comparatively longer period of detention may reflect a further example of these individuals being let down by services. It would therefore be important for future research to develop more accurate methods of 'making sense of', and formulating, future risk for those who have committed unpredictable and 'out of the blue' violence. Many of the current risk factors considered in assessing risk of future violence, such as historical violence, evidence of conduct

disorder or pro-criminal attitudes may not apply to these individuals, making it difficult for professionals to formulate using evidence based risk assessment tools.

This research seems to suggest that this group of individuals may be qualitatively different to offenders who commit violence that is part of a pattern of behaviour. Further research is needed to clarify whether this is truly the case and, if so, what these differences are. If the consequences of committing a single, 'out of character' act of violence are different to those of committing repeated violence, this may imply that a different approach to treatment would be more appropriate. Further research is needed to consider how best to support these individuals in their recovery.

Limitations of this research

One significant limitation of this research was that it was not possible to know with absolute certainty that participants had not committed any other acts of serious violence prior to their index offence. Attempts were made to address this by reviewing clinical notes, asking the Responsible Clinician to verify the appropriateness of suggested participants, and discussing this issue with the participants. However, if an act of violence had been committed of which professionals involved in the participants' care were not aware, it seems unlikely that participants would have disclosed this to the researcher due to implications for their future progress to medium secure services. Despite assurance that the interview was confidential and would not impact on the participants' care or treatment, it is possible that individuals taking part in this research felt it would be in their best interests to portray themselves in a positive light due to a misguided idea that information from the interview could contribute to decisions regarding discharge. It is also possible that participants felt implicit pressure to consent to being interviewed.

Conclusions

This research suggests that the psychological and emotional sequelae of committing a single, 'out of character' act of serious criminal violence are complex and varied, significantly impacting upon the lives of the perpetrators, the victims and their relatives. Despite the difficulties experienced

by participants, there was a prominent belief that recovery was possible, and an, albeit somewhat cautious, sense of a hope for the future.

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