AGEING, HEALTH AND CONFLICT

AN INVESTIGATION OF THE
EXPERIENCE AND HEALTH IMPACT
OF 'TROUBLES-RELATED' TRAUMA
AMONG OLDER ADULTS IN
NORTHERN IRELAND

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THE BAMFORD CENTRE FOR MENTAL HEALTH AND WELLBEING AT THE UNIVERSITY OF ULSTER

The University has established a Centre for Health and Wellbeing in keeping with its Research Strategy. This Centre offers the opportunity to establish 'research spaces' where excellent international research is undertaken by the bringing together of researchers from different disciplines.

As part of this development, the Bamford Centre for Mental Health and Wellbeing (BCMHW) was created. It takes advantage of the University's significant expertise in this field and recognises the very high priority mental health occupies in regional, national and international government policies. It is named after the late Professor David Bamford, of the University of Ulster, who made outstanding contributions to academic and policy developments in the Centre's specialist areas.

Over a prolonged period, the university has developed expertise in a range of areas that relate to mental health and its related conditions. University of Ulster researchers have an international reputation in mental health.

Their work helps shape government policies and provides a wealth of statistics and data that influence therapeutic approaches and a continuous worldwide debate on mental health issues. They are members of the World Mental Health Consortium (WMHC), a select band of some 30 research groups in universities and institutes that share exclusive data and conduct joint projects.

The Centre continues to develop new fields of joint study with academic colleagues who work across a wide range of disciplines on the University's four campuses.

Current areas of research expertise within the Centre include:

• Suicide and self-harm, geographic mapping, service improvements;
• Post Traumatic Stress Disorder; economic costs and clinical interventions;
• Burden of mental health and health needs across Europe;
• Mental health and ageing;
• Mental health and diabetes;
• Addictions;
• Secondary analysis of many of the key datasets on mental health.

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RESEARCH PARTNER

THE NORTHERN IRELAND CENTRE FOR TRAUMA AND TRANSFORMATION TRUST

The NICTT Charitable Trust was formed in 2001 to support the establishment and operations of the Northern Ireland Centre for Trauma and Transformation.

The Centre opened in 2002 and closed at the end of 2012. During this period it provided a specialist trauma-focussed cognitive therapy programme (Ehlers & Clark), when approximately 700 enquires and referrals for help were received from members of the public.

The Centre developed and delivered both academic and vocational accredited training programmes, aimed at increasing the skills of the workforce in supporting and delivering psychological therapy and associated services, and in promoting knowledge and practice in the recognition and treatment of trauma related disorders within the context of conflict.

Its research programme included a randomised controlled trial of its treatment programme which investigated the effectiveness of trauma-focussed cognitive therapy in the treatment of chronic conflict related trauma disorders, specifically post traumatic stress disorder.

The Centre also delivered a number of conflict-related trauma-focused training and development programmes in other areas affected by conflict, including Bosnia, Nepal, Sri Lanka and New York after 9/11.

The NICTT Trust continues to explore ways in which it can assist in the development of trauma related policy and services for communities affected by conflict and war.

Contact the NICTT Trust on nictt01@gmail.com.

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PREFACE

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The study is the third in a series undertaken by the partnership of the Bamford Centre for Mental Health and Wellbeing at the University of Ulster and the Northern Ireland Centre for Trauma & Transformation Trust. The three studies have investigated the impact of traumatic events on the mental and physical health of the adult population in Northern Ireland, with a specific focus on the impact of the civil conflict.

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Together, with the Northern Ireland Study of Health & Stress (NISHS), the source of most of the primary data, these three major studies provide substantial evidence of the experience and impact of traumatic events in the lives of adults. They also provide detailed insights into the mental health and related consequences of the civil conflict. The findings and conclusions have clear implications for policy, assessment of needs, commissioning of services, service standards and provision, training of practitioners and practice.

The initial core research, the NISHS, was undertaken by the University of Ulster with support from the Research & Development Office of the Department of Health, Social Services and Public Safety for Northern Ireland. The UK's Big Lottery Fund provided the grant for the initial study of trauma-related disorders to the research NICTT Trust-Bamford Centre partnership. The Report on this study was published in May 2008 (Trauma, Health & Conflict, Ferry et al., 2008).

The research team then sought support to undertake two further investigations. The first was to explore the health economic impact of post traumatic stress disorder (PTSD) in Northern Ireland. The Report on this study was published in December 2011 (The Economic Impact Of Post Traumatic Stress Disorder In Northern Ireland, Ferry et al., 2011). This work was funded by The Lupina Foundation of Canada.

The current study is the second of the two. With support from The Atlantic Philanthropies, the research team investigated further what appeared to be a higher than expected level of exposure to traumatic events by those aged 45 years and older, observed in the earlier studies. This Report provides a detailed assessment of the experience and needs of the older portion of the adult population of Northern Ireland with particular reference to the civil conflict.

We place on record our appreciation and admiration for those members of the public who contributed by participation in the studies, especially for their sharing of difficult experiences and memories. We hope this series of studies and reports will both encourage and enable the development of policy and services to address effectively the needs of those who continue to experience trauma related disorders and problems in their daily lives.

BACKGROUND AND INTRODUCTION

The current Report presents evidence examining the experience and impact of 'Troubles-related' traumatic experiences among the older population in Northern Ireland (individuals aged 45 year and older). The study upon which this Report is based is the latest in a series of collaborative studies undertaken by a partnership of the Bamford Centre for Mental Health and Wellbeing at the University of Ulster (UU) and the Northern Ireland Centre for Trauma & Transformation (NICTT) Trust.

As outlined in previous reports and papers by the research team, Northern Ireland presents a very specific case study for the examination of the experience and impact of traumatic experiences, given the legacy of many years of civil violence that characterised its recent history (Ferry et al., 2008; Ferry et al., 2011; Ferry et al., under review). During this period of over 30 years of violence, colloquially termed as the "Troubles", there were almost 4,000 deaths, 48,000 physical injuries, 34,000 shootings and 14,000 bombings (Fay et al., 1997; Daly, 1999; PSNI, 2003).

Furthermore, based on analysis of data from the Northern Ireland Study of Health and Stress (NISHS, the largest epidemiological study of mental health disorders in Northern Ireland), the UU-NICTT research partnership has previously produced the first representative estimates of the prevalence of traumatic experiences, post traumatic stress disorder (PTSD) and other mental health disorders associated with traumatic experiences among the Northern Ireland adult population (Ferry et al., 2008; Ferry et al., under review). These studies clearly indicate that traumatic events associated with the conflict have been a prominent feature in the lives of the adult population and are associated with adverse mental health outcomes.

One of the most striking findings from this previous body of research is that Northern Ireland has the highest rates of PTSD among comparable estimates produced from other countries. Among the adult population, an estimated 8.8% of individuals had PTSD at some point in their lifetime, whilst 5.1% had PTSD in the previous year. Whilst PTSD is an important indicator of the impact of traumatic events on the population (given its diagnostic link with experience of trauma), a range of other disorders may develop in association with exposure to trauma. Previous findings also show that individuals who experience a lifetime traumatic event are more likely to develop a range of other conditions such as depression, other anxiety disorders and alcohol problems for example (Ferry et al., under review). Furthermore, previous research based on the NISHS also suggests a significant association between the experience of trauma and chronic physical health conditions (Ferry et al., 2008; Bunting et al, under review (a)).

Whilst this evidence provides an indication of the impact of trauma among the general population, the current study focuses specifically on the experience and current impact of 'Troubles-related' trauma among the older portion of the Northern Ireland adult population. The reasons for focusing on this specific age cohort were threefold. First, this particular population group lived through the duration of 30-40 years of civil conflict in Northern Ireland. Many of these individuals would have been in their late teens and early 20s at the height of the violence. Secondly, findings reported in Trauma, Health and Conflict (Ferry et al., 2008) pointed to elevated exposure to traumatic events among individuals aged 45-64 in particular, highlighting the need to investigate the mental health consequences among this cohort. Finally, current and projected population trends, which highlight the ageing population in Northern Ireland, point to the need for a strong evidence-base to inform the provision of services for older people. Figures from the Northern Ireland Statistics and Research Agency (NISRA) estimate that the number of people aged 65 and over will increase from 260,000 in 2010 to 370,000 by 2025, an increase of 109,000 or 42 per cent, which presents a particular challenge in terms of increasing health needs and service demands (NISRA, 2011).

A 2007 Report published as part of the Bamford Review of Mental Health and Learning Disability points to a number of key issues relating to adult mental health in Northern Ireland. Aside from the elevated and increasing prevalence of dementia among older people, the 'Living Fuller Lives' Report identifies depression as the other main mental health issue among the older population as well as other conditions such as anxiety and drug and alcohol problems. The Report points to the lack of information about the prevalence of mental health needs amongst this subgroup. It suggests that mental illness among older people is often unrecognised due to many older people living alone, and is under-diagnosed particularly in care home settings (Department of Health and Social Services and Public Safety Northern Ireland, 2006).

Given the prominence of traumatic experiences among the ageing population of Northern Ireland suggested in previous reports, the ageing profile of the overall Northern Ireland population, and the lack of robust estimates of mental health conditions among this subgroup, it is clear that an evidence base is required to inform the planning and adequate provision of effective mental health and wider health-related services for older people in Northern Ireland. The current Report aims to provide key evidence in this respect.

The Methodology is described in Appendix 1.

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06 | SUMMARY OF THE KEY FINDINGS

The research team also draw attention to the recommendations of Trauma, Health & Conflict (Ferry et al, 2008) reproduced in Appendix 2 and the observations and recommendations of the 2012 Report, The Economic Impact of Post Traumatic Stress Disorder in Northern Ireland, pages 19-20; (Ferry et al., 2012).

1. The ageing population has had a higher incidence and distinctive profile of experience of traumatic events associated with the period of major violence in the 1970s and 1980's.

2. The prevalence of exposure to 'conflict-related' incidents is not focussed solely or mainly on those with low socio-economic status (as indicated in previous studies), but increases as income level and educational attainment increases. This might be a feature of the secondary incidental experiences of trauma linked to primary events.

3. Having a lifetime traumatic experience is associated with having one or more lifetime mental health disorders. This trend is even more marked for those who have had traumatic experiences associated with conflict.

4. Individuals who experienced a traumatic event (either 'conflict-related' or 'non-conflict' related) were more likely to have a range of chronic physical health conditions, highlighting the need for a holistic approach to the provision of services for trauma-related health needs amongst older adults.

5. Primary care services are the main point of contact for those who are seeking help with mental health concerns and who have had traumatic experiences. This tradition of service access and usage has implications for future service design and development.

6. The qualitative findings from the follow-up study of 225 participants in the Northern Ireland Study of Health & Stress, which included people who had experienced Troubles related traumatic events, provide valuable evidence of experiences, needs and service requirements, which should inform policy and service development for those with enduring psychological and mental health disorders arising from their experiences of the conflict.

PRESENTATION OF RESULTS

RESULTS CONTAINED WITHIN THIS REPORT ARE PRESENTED IN TWO SECTIONS

Section A

Section A presents results from analysis of data from the NISHS, isolating the subgroup aged 45 and over. This section firstly presents a demographic profile of this subgroup and subsequently examines the prevalence of traumatic events and the association of experience of traumatic events with demographic indicators, lifetime mental health disorders and lifetime chronic physical health conditions.

In addition the prevalence of service use among individuals over 45 who experienced conflict is presented in an attempt to identify levels of unmet need among this population group

Section B

Section B focuses on findings from analysis of data collected in the follow-up interviews with 225 participants selected from the NISHS. This section presents results under a number of key themes including:

• Experience of traumatic events and 'Troubles-related' traumatic events;

• The impact of the 'Troubles' on various aspects of life;

• The experience and impact of fear among individuals who experienced 'Troubles'-related trauma;

• Levels of service use and treatment among this sub-group;

• The impact of Troubles-related violence and of political and other developments.

As well as quantitative findings, this results section also provides a deeper insight into individual experiences of the 'Troubles' by presenting key themes and statements derived from answers to more qualitative questions in the follow-up study.
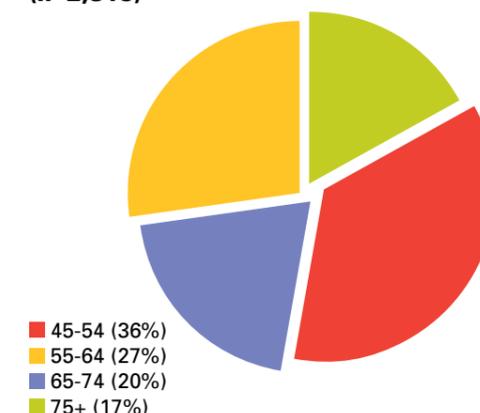
SECTION A

RESULTS FROM THE NISHS ON THE SUBGROUP OF INDIVIDUALS AGED 45 AND OVER

DEMOGRAPHIC BREAKDOWN OF THE NISHS SAMPLE

As described in Appendix 1 (Methodology), the NISHS includes a representative sample of 4,340 adults living in households in Northern Ireland. The subsample of individuals aged 45 and over involved 2,315 individuals, representing a substantial 47% of the entire NISHS sample.

To summarise, 54% (n=1,249) of the subsample were females and 46% (1,066) were males. In terms of the age profile of the overall NISHS sample aged 45 and over (Figure 1), the group aged 45-54 at the time of the NISHS interview represented the largest group (36%, n=790); followed by those aged 55-64 (27%, n=673); those aged 65-74 (20%, n=521); and finally those aged 75+ (17%, n=331). The majority of individuals aged over 45 were married (68%; n= 1,494) while 23% (n=595) were separated, divorced or widowed (previously married) and 9% (n=226) never married.

Figure 1:
Breakdown of the NISHS sample of individuals aged 45 and over by age-group (n=2,315)

■ 45-54 (36%)
■ 55-64 (27%)
■ 65-74 (20%)
■ 75+ (17%)

PREVALENCE OF ANY TRAUMATIC LIFE EVENT AMONG THOSE AGED 45 AND OVER

In the PTSD section of the original NISHS interview, participants were presented with 28 specific types of traumatic event and asked whether they had ever experienced them during their lifetime. Table 1 shows the prevalence of experience of any lifetime traumatic event (either conflict or non-conflict related) among those aged under 45 and those aged 45 and older. As reported in previous papers by the research team (Ferry et al., 2011; Ferry et al., under review), the overall prevalence of any traumatic experience was 60.6%, which represents a similar figure to that found in other epidemiological research (Galea et al., 2005). Individuals aged 45 and over were significantly more likely to have had a traumatic experience with almost 66% endorsing at least one traumatic life event compared to 56% of those aged under 45.

Table 1:
Prevalence of any lifetime traumatic event

Age-group	Lifetime prevalence of any traumatic event % (n)	95% confidence interval
Under 45	56.3 (568)	52.1 - 60.3
45 and over	65.7 (719)	62.1 - 69.1
Overall*	60.6 (1287)	57.9 – 63.3

*X^2 test indicates significant gender differences at the 5% level.

SECTION A

RESULTS FROM THE NISHS ON THE SUBGROUP OF INDIVIDUALS AGED 45 AND OVER

PREVALENCE OF 'CONFLICT-RELATED' TRAUMATIC EVENTS

The primary aim of this Report is to determine the experience and impact of 'Troubles-related' trauma on individuals aged 45 and over in the Northern Ireland population. Bearing in mind the limitations of the NISHS data in identifying 'Troubles-related' traumatic events (see Appendix 1 for more details), Table 2 shows the prevalence of 'conflict-related' traumatic events . The most prevalent type of 'conflict-related' event for both age-groups was 'civilian in a region of terror' followed by 'witnessed death or serious injury'. The overall prevalence of any 'conflict-related' traumatic event was 37.4% amongst those under 45 and 40.8% amongst those 45 and over. Although this overall difference was statistically non-significant, an examination of individual event types (e.g. 'civilian in a region of terror' and 'saw atrocities') shows that a number of specific conflict-related traumatic events were significantly more prevalent among those aged 45 and over. Findings in relation to the experience of 'conflict-related' traumatic events are presented in detail in Table 2.

Table 2:

Comparison of lifetime experience of 'conflict-related' traumatic events among those under 45 and those aged 45 and over[1]

Event Type	Aged Under 45	Aged 45 & over
Civilian in a place of ongoing terror*	16.4	23.1
Witnessed death or serious injury	16.3	17.6
Mugged or threatened with a weapon	10.2	8.0
Manmade disaster**	5.5	7.6
Saw atrocities*	2.2	4.6
Beaten by someone else*	9.2	4.1
Combat experience*	1.6	3.6
Civilian in warzone	3.4	2.8
Relief worker in warzone*	0.6	2.2
Kidnapped	1.6	1.2
Refugee	0.8	1.0
Purposely caused serious injury or death	0.3	0.3
Any conflict-related event	37.4	40.8

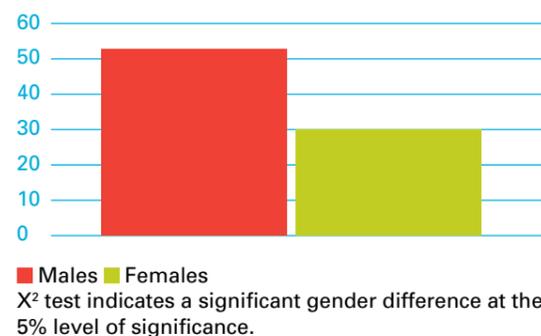*X[2] test indicates a significant difference between age categories at the 5% level of significance.

**X[2] test indicates a significant difference between age categories at the 10% level of significance.

Figures 2-5 show the prevalence of any 'conflict-related' traumatic event amongst those aged 45 and over in terms of key socio-demographic characteristics. Among this sub-sample, males were significantly more likely than females to have experienced a 'conflict-related' traumatic event (Figure 2; 53.1% versus 30.2%). The higher risk of exposure of males to conflict or war related events has been consistently found in previous studies (e.g. meta analysis by Tolin & Foa, 2006) and reflects findings among the overall NISHS sample (Ferry et al., under review).

Differences in the prevalence of any 'conflict-related' traumatic event are less marked with regard to marital status (Figure 3) with the highest prevalence among those who were never married (44.2%) followed by those who were married (41.3%) and those who were previously married (37.9%). In contrast, the prevalence of conflict in relation to educational attainment and household income level show an interesting trend of increasing prevalence with increasing educational attainment and income levels (Figures 4 and 5).

This finding is unexpected given that much of the 'Troubles-related' violence was concentrated in areas of low socio-economic status or social deprivation (McConnell et al., 2002; Fay et al., 1999).

Figure 2:

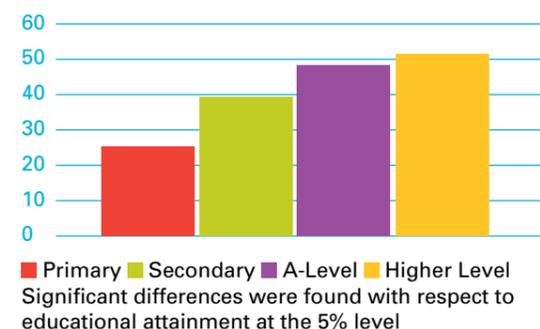**Prevalence of having experienced any conflict-related traumatic event by gender (among those aged 45 and over)**

■ Males ■ Females
X[2] test indicates a significant gender difference at the 5% level of significance.

Figure 3:

Prevalence of having experienced any conflict-related traumatic event by marital status (among those aged 45 and over)

■ Married ■ Separated / Widowed / Divorced
■ Never Married
No significant differences were found with respect to marital status at the 5% level

Figure 4:

Prevalence of having experienced any 'conflict-related' traumatic event by highest educational attainment (among those aged 45 and over)

■ Primary ■ Secondary ■ A-Level ■ Higher Level
Significant differences were found with respect to educational attainment at the 5% level

Figure 5:

Prevalence of having experienced any 'conflict-related' traumatic event by household income level (among those aged 45 and over)

■ Low ■ Low-Average ■ High-Average ■ High
Significant differences were found with respect to household income level at the 5% level

PREVALENCE OF LIFETIME MENTAL HEALTH DISORDERS AMONG THOSE AGED 45 AND OVER WHO EXPERIENCED TRAUMATIC EVENTS

Table 3 compares the prevalence of a range of lifetime mental health disorders among (1) those who did not experience any traumatic event, (2) those who experienced a non-conflict related trauma only, and (3) those who experienced a 'conflict-related' trauma. For example 8.3% of individuals who did not experience trauma met the criteria for Major Depressive Disorder (MDD) at some point in their lifetime compared to 15.9% of those who experienced a non-conflict-related event only, and 22.4 % of those who experienced a 'conflict-related' trauma. The most prevalent disorders among those who experienced a 'conflict-related' trauma were MDD (22.4%), alcohol abuse (17.1%) and PTSD (14.6%). Overall, almost half (47.7%) of those individuals who experienced a 'conflict-related' traumatic event met the criteria for at least one mental health disorder during their lifetime. This compares with a third of those who experienced a 'non conflict-related' event only and one fifth of those who did not experience any lifetime traumatic event. Individuals who experienced conflict were more likely to have met the criteria for any lifetime anxiety, mood, substance use and impulse control disorder at some point during their lifetime. This association between the experience of conflict-related events and poor mental health is clearly shown in Figure 6.

Table 3: Prevalence of lifetime DSM-IV mental health disorders by trauma grouping

Disorder	Prevalence among those who did not experience any trauma event %	Prevalence among those who experienced a 'non-conflict related' trauma only %	Prevalence among individuals who experienced a 'conflict-related' trauma %
Agoraphobia*	0.5	2.0	3.3
Adult separation anxiety*	0.5	3.2	6.5
GAD*	3.4	6.7	9.3
Panic disorder*	1.3	2.4	3.4
PTSD*	-	11.4	14.6
Separation anxiety disorder*	0.3	1.7	3.5
Social phobia*	3.0	2.3	8.3
Specific phobia*	5.3	10.1	10.9
Any anxiety disorder*	10.3	23.0	31.4
Bipolar disorder*	0.8	1.5	3.2
Dysthymia	2.0	2.6	4.1
Major depressive disorder*	8.3	15.9	22.4
Any mood disorder*	9.2	17.0	25.5
Alcohol abuse*	4.8	5.1	17.1
Alcohol dependence*	2.1	0.7	3.8
Drug abuse	0.1	0.9	1.1
Any substance disorder*	4.8	5.2	17.4
Attention deficit disorder	0.7	1.3	1.6
Conduct disorder*	-	0.3	3.6
IED*	1.1	1.5	4.3
ODD*	0.1	1.4	4.6
Any impulse-control disorder*	1.3	3.0	10.6
Any lifetime disorder*	19.0	33.0	47.7

Abbreviations: GAD, generalised anxiety disorder; PTSD, posttraumatic stress disorder; IED, intermittent explosive disorder; ODD, oppositional defiant disorder.*indicated significant differences between groups at the 5% level. This group includes those who may have had other non-conflict related traumatic experiences as well as one or more conflict experiences
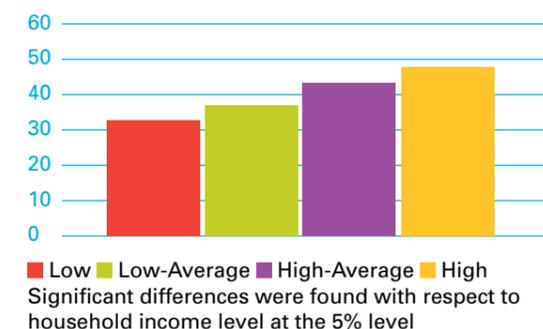
1. Traumatic event types from the list of 28 that were characteristic of the 'Troubles' and which first occurred from 1968 onwards (see Ferry et al., 2011 for more details).

SECTION A

RESULTS FROM THE NISHS ON THE SUBGROUP OF INDIVIDUALS AGED 45 AND OVER

Figure 6:
Prevalence of lifetime mental health disorders across trauma groups

■ No Trauma ■ Non-conflict Trauma ■ Conflict Trauma
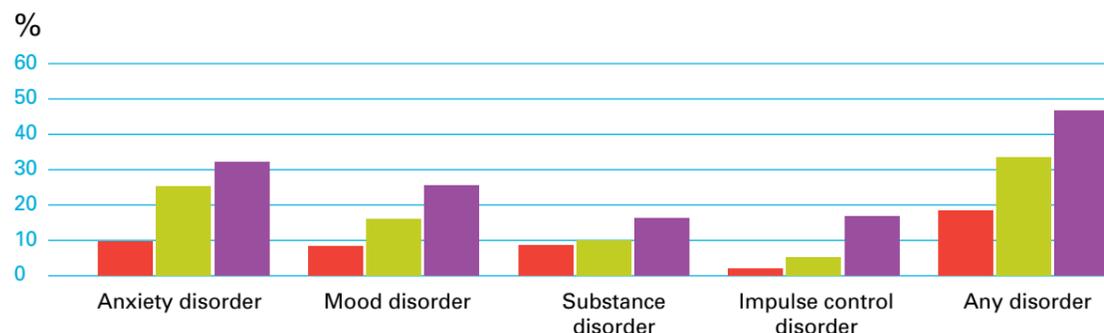
**THE ASSOCIATION OF TRAUMATIC EXPERIENCES
WITH LIFETIME CHRONIC PHYSICAL HEALTH CONDITIONS**

Previous research carried out by the UU-NICTT team has suggested a significant association between the experience of trauma and the prevalence of chronic physical health conditions (Ferry et al., 2008; Bunting et al., under review). The current study therefore compared the prevalence of a range of chronic physical health conditions among those aged 45 and over, across the three trauma categories described earlier.

Results in Table 4 show that the prevalence of most of the conditions considered was higher among those that had experienced trauma (of any type) compared to those who had not. Interestingly the prevalence of any chronic condition was highest among the 'non-conflict related group' (82.6%) followed by the 'conflict-related group' (76.4%) and 'no trauma group' (68.0%)

Table 4:
Lifetime prevalence of chronic physical health conditions by trauma group

Chronic condition	Prevalence among those who did not experience any trauma event %	Prevalence among those who experienced a 'non-conflict trauma' only %	Prevalence among individuals who experienced a 'conflict-related' trauma %
Arthritis/rheumatism**	29.7	40.4	30.4
Any pain condition	31.6	46.3	35.0
Seasonal allergies*	8.0	14.6	16.8
Any cardiovascular condition*	35.5	42.7	30.8
Any respiratory condition	7.5	9.6	10.4
Diabetes or high blood sugar	7.4	4.8	6.1
Stomach ulcer*	3.9	8.7	10.9
Epilepsy or seizures	0.8	0.4	1.3
Cancer*	1.4	9.1	5.1
Any chronic condition*	**68.0**	**82.6**	**76.4**

*X^2 test indicates a significant difference between age categories at the 5% level of significance.
**X^2 test indicates a significant difference between age categories at the 10% level of significance.

**SERVICE USE AMONG INDIVIDUALS WHO EXPERIENCED CONFLICT
AND HAD ANY LIFETIME DISORDER (AMONG THOSE AGED 45 AND OVER)**

Table 5 provides a brief overview of service use among individuals aged 45 and over who had a 'conflict-related' experience and met the criteria for a mental health disorder. Overall, two thirds of these individuals visited some type of health or non-health professional about emotional problems during their lifetime. It should be noted that the visits reported may not necessarily have been in relation to emotional problems associated with the experience of conflict. The most visited service provider was the GP or family doctor, visited by 63% of this sub-group followed by the psychiatrist (31%) and other mental health professional (17%).

Table 5:
Lifetime use of services among individuals that experienced a 'conflict-related' traumatic event and had any lifetime disorder (among those aged 45 and over)

| Service Provider	% Service contact among those who experienced a 'conflict-related' trauma and had any lifetime disorder (among those aged 45 and over)
General Medical Practitioner/family doctor	63.0
Psychiatrist	31.0
Other Mental Health Professional	17.0
Complementary and Alternative Medicine	14.1
Human Services	4.7
Any Services	**66.6**

DISCUSSION OF
SECTION A RESULTS

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This Section has reported the principal findings relating to those aged 45 years and over who took part in the NISHS, involving 2,315 of the total sample of 4,340 adults who participated in the original study. The current study looking at the older population was undertaken in view of the apparent higher level of exposure to traumatic events, which, on the face of it, was in part accounted for by traumatic events associated with conflict.

Overall the demographic profile of the sample in this study (n=2,315) is broadly in line with the full NISHS sample of 4,340. In terms of traumatic experiences and their consequences, the examination of those aged 45 years and over revealed a higher level of exposure to traumatic events ('conflict-related' and 'non-conflict related') compared to those aged under 45 years, with almost 66% endorsing at least one traumatic life event compared to 56% of those aged under 45. This finding might, in the absence of conflict in Northern Ireland, be accounted for by the passage of time. In other words, the older we live, the more likely we are to have any, and indeed additional, traumatic experiences. However, as we will see the 'conflict-related' events accounted for a significant level of traumatic event types for this sub-sample aged 45 and over.
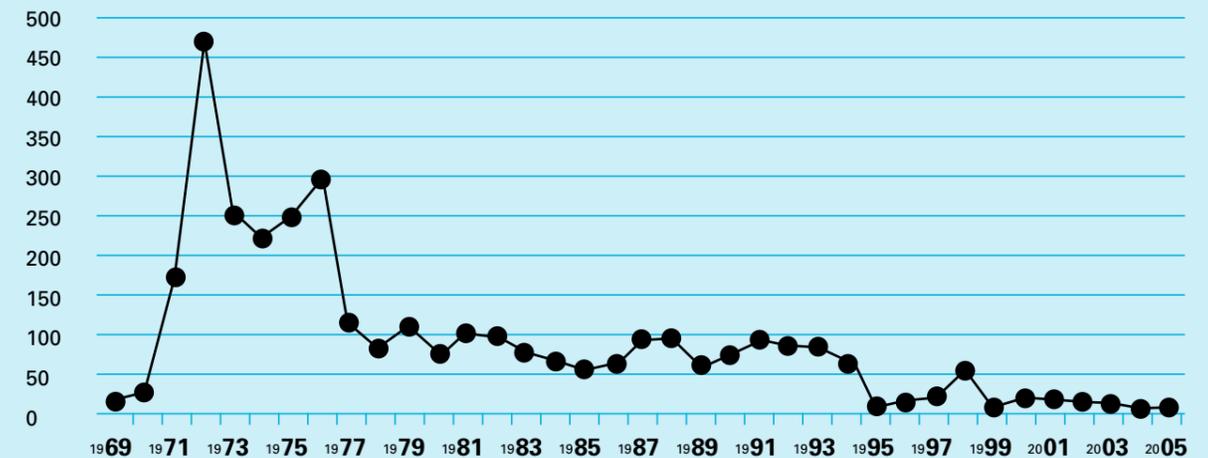
It is difficult to assess what level of exposure this older sub-sample might have experienced in the absence of conflict. First, it is likely that the 'Troubles' displaced other traumatic events that might otherwise have occurred in normal civic society. We might for example have expected to see proportionately more accidents as a consequence of young men in particular, taking part in sporting activities or risky behaviours. Also, societal norms are likely to change over time. The presence of more, faster cars, with more people able to drive, is likely to have an impact on the number of road accidents for example. The availability and usage of alcohol and drugs, is another example of how things have changed which are likely to have a bearing on the changing pattern of traumatic experiences.

Exposure to 'conflict-related' events (as defined by the research team in an earlier study) was looked at more closely and a comparison of lifetime exposure to conflict-related traumatic events was made between those under 45 and those aged 45 and over. Here the overall results were broadly similar with the older portion having experienced slightly more traumatic events (40.8% for the older group compared with 37.4% for the younger.) Looking at the statistically significant variations more closely, the older sample had higher levels of exposure for:

• **Civilian in a place of on-going terror**

• **Combat experience**

• **Relief worker in a war zone**

• **Manmade disaster**

• **Saw atrocities**

These experiences are more characteristic of the main period of violence associated with the 'Troubles' in the 1970's and 1980's, with widespread levels of disruption at times and in certain localities, gun attacks and battles and more frequent large scale events involving many injuries and deaths (McKittrick et al., 1999). Figure 7 illustrates the profile of Troubles related deaths over the main period of violence associated with the conflict.

This probably explains in good measure why this older sample has had more experiences of these types of events. On the other hand the younger sample has reported slightly higher levels of being 'Beaten by someone else'. This might be due in part to increases in social (as compared to 'conflict-related') violence.

As noted already, unexpectedly, exposure to traumatic events increased with the level of educational attainment and the level of income. This finding ran counter to the expectation derived from the Cost of the Troubles Study (Fay et al., 1998) and others that violence was more prevalent in areas of higher deprivation. The reasons for this are not clear. One possible explanation might be that adults with higher levels of educational attainment and higher mean incomes, for example those working in the health services, might well have had a proportionately higher level of exposure to events linked to conflict than the general population and that the study is picking up these secondary exposures to traumatic events.

Later, in Section B, we will see something of this secondary exposure. In other words when for example a bomb explodes this index event clearly impacts upon and affects those directly present. When we add the rescuers, those nearby who witness the aftermath, those who convey people to hospital, the emergency and hospital services, members of the public who are related to those who have died and are injured, or are missing, those whose home lives and livelihoods are disrupted, others such as news reporters and undertakers who undertake key functions on behalf of the community etc., these events can affect many beyond the immediate vicinity and experience of the primary traumatic event.

DISCUSSION OF
SECTION A RESULTS

15   **16**

In the next part of Section A, the prevalence of lifetime mental health disorders (DSM-IV) among individuals aged 45 and over was compared across three groups. Again, these were:

1. Those who did not experience any traumatic event;

2. Those who experienced a 'non-conflict related' trauma only, and,

3. Those who experienced a 'conflict-related' trauma.

Here, the findings reflect the trend found in the full original study. Those who had had a traumatic experience ('conflict' or 'non-conflict related') were more likely to have one or more lifetime mental health disorders. Those reporting a 'conflict-related' experience were more likely again to have one or more lifetime mental health disorders. The key point is that having a traumatic experience is associated with a poorer mental health profile and that experiences associated with the conflict are a marker for an even more adverse mental health profile in this older sample of the adult population.

Section A also compared the prevalence of lifetime chronic physical health conditions across the three aforementioned trauma groups (among those aged 45 and over) and found similar associations with respect to the risk that traumatic experiences pose in terms of adverse physical health outcomes. Specifically, individuals who experienced a traumatic event ('conflict' or 'non conflict-related') were generally more likely than those who did not experience any type of traumatic event to have one or more specific chronic physical health conditions.

There are however no consistent patterns with respect to traumatic event types and the prevalence of these health conditions, although the prevalence of any chronic conditions was higher among the 'non-conflict related' group followed by the 'conflict-related' group and the 'no trauma' group. The key point is however that having a traumatic experience (either 'conflict' or 'non-conflict related') is more strongly associated with having one or more chronic physical health conditions, compared with never having had a traumatic experience.

These findings, and those of the 2008 Report (Ferry et al., 2008), point to the additional health needs of people who have had traumatic experiences. If we are to make holistic assessments of need, then mental health and physical health should each be part of a comprehensive assessment. People with chronic physical health conditions who are seeking health-related services may have had traumatic experiences. Conversely, people using mental health services associated with trauma might also have chronic physical health problems. There is a clear case for a holistic approach to assessments and treatments, with the possibility that provision of effective mental health treatments for trauma related disorders might be clinically recommended to bring about improvements in an individual's physical health.

Section A also presents results in relation to service use among those aged 45 and over, who experienced a 'conflict-related' traumatic event and had one or more lifetime mental health disorders. In terms of assessing whether the needs of individuals with conflict-related health needs, the NISHS data presents some limitations.

Specifically questions about service use were asked in relation to 'problems with emotions nerves or mental health' and not specifically about mental health problems associated with the experience of conflict. For example, the study questionnaire did not enquire about the use of the unique victims and survivors voluntary sector services associated with the 'Troubles', in place within Northern Ireland.

However, the pattern of usage in this older sample is similar to the full sample of the NISHS. GPs are the chief point of contact, not a surprising finding given health service arrangements and the familiarity of the population with the primary health care structures.

This is nonetheless an important confirmation of service access and usage. If effective services for those affected by the civil conflict (and trauma related needs in general) are to develop then linkages with primary care are clearly a critical consideration. This would suggest that a key way forward in service development is through equipping GPs and associated professionals with the wherewithal to detect trauma related needs, to be able to respond appropriately within their scope of competence and to be able to refer to more specialist trauma related treatment services (assuming such services are themselves developed and in place).

Essentially this involves a tiered or stepped care trauma service founded upon a clear trauma focussed philosophy and service structure. If GPs are to be able to respond to the now chronic trauma related needs associated with the 'Troubles' (and with other traumatic experiences) then they need the backup from specialist effective trauma services that are routinely and readily accessible within the community, otherwise they have nobody to refer people on to and their support for people affected by trauma related disorders is likely to be restricted to symptom management rather than cure and recovery.

In conclusion, the findings in relation to those aged 45 years and older who participated in the NISHS are that:

- The ageing population has had a higher incidence and distinctive profile of experience of traumatic events associated with conflict, with a distinctive pattern of exposure associated with the period of major violence in the 1970s and 1980's.

- The prevalence of exposure to 'conflict-related' incidents is not focussed solely or mainly on those with low socio-economic status (as indicated in previous studies), but increases as income level and educational attainment increases. This might be a feature of the secondary incidental experiences of trauma linked to primary events.

- Having a lifetime traumatic experience is associated with having one or more lifetime mental health disorders. This trend is even more marked for those who have had traumatic experiences associated with conflict.

- Individuals who experienced a traumatic event (either 'conflict-related' or 'non-conflict' related) were more likely to have a range of chronic physical health conditions, highlighting the need for a holistic approach to the provision of services for trauma-related health needs amongst older adults.

- Primary care services are the main point of contact for those who are seeking help with mental health concerns and who have had traumatic experiences. This tradition of service access and usage has significant implications for future service design and development.

SECTION B

RESULTS FROM THE FOLLOW-UP STUDY

DEMOGRAPHIC PROFILE OF THE FOLLOW-UP SAMPLE

As outlined in the methodology section (see Appendix 1), the follow-up study included a final sample of 225 individuals who experienced a traumatic event associated with conflict (as identified in the NISHS), were aged 45 or older and had agreed to take part in future studies during their original NISHS interview.

The follow-up sample represents a fairly even gender split with 52% (116) female and 48% (109) male participants. Almost two thirds of the follow-up sample were married (65%, n=146), while 25% were previously married (n=57) and 10% never married (n=22). The highest percentage of participants were in the 55-64 age-group (36%, n=81) followed by the 65-74 (27%, n=60) and 75+ (20%, n=46) (Figure 8). The 45-54 age-group represented the smallest sample (17%, n=38) in contrast to the age profile of all participants in the NISHS sample aged over 45 (see Figure 1 in Section A).

Figure 8:
Breakdown of the follow-up sample (n=225) by age-group

- 45-54 (17%)
- 55-64 (36%)
- 65-74 (27%)
- 75+ (20%)
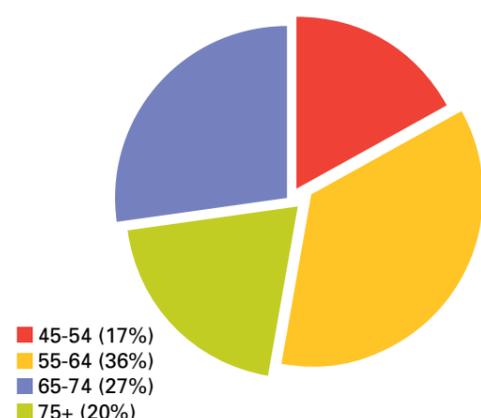
EXPERIENCE OF LIFETIME TRAUMATIC EVENTS AND 'TROUBLES-RELATED' TRAUMATIC EVENTS AMONG THE FOLLOW-UP SAMPLE

Similar to the original NISHS interview, participants in the follow-up study were presented with 28 types of traumatic experience and asked whether they had ever experienced these events during their lifetime. As outlined previously, the original NISHS interview did not include specific questions about whether traumatic life events were linked to the 'Troubles'. In order to gain a more detailed understanding of the experience of 'Troubles-related' events, individuals were therefore asked about 'Troubles–related' traumatic events in the follow-up study.

Specifically, if an individual endorsed any of the 28 types of traumatic event they were subsequently asked if the event was linked to the 'Troubles'. Table 6 summarises information in relation to the experience of all traumatic life events and, specifically, the experience of 'Troubles-related' events.

The most prevalent lifetime event amongst participants in the follow-up sample was 'civilian in a region of terror' with 67.1% saying they experienced this event type at some point during their lifetime. The next most prevalent event types were 'unexpected death of a loved one' (48.4%),

'witnessed death or serious injury' (33.3%) and 'man-made disaster' (21.8%). The prevalence of 'conflict-related' events (as defined previously), such as 'civilian in a region of terror' is higher amongst the sub-group of individuals in the follow-up study than among the main NISHS sample. This is to be expected given that follow-up participants were selected on the basis that they had experienced at least one type of 'conflict-related' event.

In terms of the experience of 'Troubles-related' events, again a few specific event types stand out as more prevalent in the sample than others. Almost 58% of the overall sample said they were a 'civilian

in a region of terror' in the context of the 'Troubles'; almost 18% experienced a 'Troubles-related' man-made disaster, 12.5% were 'mugged or threatened with a weapon' associated with the 'Troubles' while 10.3% witnessed death or serious injury linked to the 'Troubles'. Interestingly traumatic event types that were not categorised as 'conflict-related' in previous analysis of the NISHS data (Ferry et al., 2008, 2011; Bunting et al., under review (a)) or indeed earlier in the current report were identified as being 'Troubles-related' by follow-up study participants.

For example, 6.3% said they experienced some other event type (not defined in the list of 28) that was associated with the 'Troubles'.

This represents almost 54% of all 'other' event types experienced by this sub-group. Similarly, 'unexpected death of a loved one' was not categorised as a 'conflict-related' event in previous analysis of the NISHS.

The follow-up study however shows that 5.8% of the follow-up study participants experienced an unexpected death of a loved one linked to the 'Troubles'. This represents almost 12% of all sudden deaths experienced by this subgroup.

Overall two-thirds of the follow-up sample, or 149 participants, experienced at least one type of 'Troubles-related' traumatic event.

Table 6:
The prevalence of lifetime traumatic events and 'Troubles-related' traumatic events among the follow-up sample

	% of follow-up sample (n=225) that experienced a traumatic event during their lifetime	N	% of follow-up sample (n=225) that experienced a 'Troubles-related' event of this type during their lifetime	N	% of all experiences of particular event type that were 'Troubles-related'
Combat experience	4.4	10	3.1	7	70.0
Relief worker in a warzone	7.1	16	4.9	11	68.8
Civilian in a warzone	5.8	13	4.9	11	84.6
Civilian in a region of ongoing terror	67.1	151	57.8	130	86.1
Refugee	2.7	6	2.2	5	83.3
Kidnapped	2.7	6	1.8	4	66.7
Toxic chemical exposure	6.2	14	3.1	7	50.0
Car accident	11.1	25	0	0	0
Other life-threatening accident	7.6	17	1.3	3	17.7
Natural disaster	1.3	3	-	-	-
Man-made disaster	21.8	49	17.8	40	81.6
Life-threatening illness	20.9	47	0	0	0
Beaten up by parents	5.3	12	0	0	0
Beaten up by spouse or partner	4.9	11	0	0	0
Beaten up by someone else	11.1	25	1.0	9	36.0
Mugged or threatened with a weapon	19.6	44	12.5	28	63.6
Raped	4.9	11	0	0	0
Sexually assaulted	7.1	16	0	0	0
Stalked	7.6	17	2.2	5	29.4
Unexpected death of a loved one	48.4	109	5.8	13	11.9
Child with a serious illness	19.1	43	0	0	0
Traumatic event to a loved one	6.7	15	2.7	6	40.0
Witnessed domestic abuse	5.3	12	0	0	0
Witnessed death or serious injury	33.3	75	10.3	23	30.7
Accidentally caused death or serious injury	0.9	2	0	0	0
Purposely caused death or serious injury	0.9	2	0.5	1	50.0
Saw atrocities	8.9	20	8.0	18	90.0
Some other event	11.6	26	6.3	14	53.9
Private event	7.6	17	1.3	3	17.7

SECTION B

RESULTS FROM THE FOLLOW-UP STUDY

INDIVIDUAL EXPERIENCE OF 'TROUBLES-RELATED' TRAUMATIC EVENTS

Individuals who said that they had experienced an event (from those listed above) and identified this event as being 'Troubles-related' were asked to provide a brief description of their experience.

As indicated in Table 6, a high proportion of the follow-up sample (almost 58%) said that they had experienced being a 'civilian in a region of terror' linked to the 'Troubles'. Descriptions of individuals' experience of this type of trauma were wide ranging and include both direct and indirect exposure to violence. The quotations provided below give an insight into the types of experiences described:

'THE TIMES WHEN CS GAS WAS USED TO CONTROL CROWDS. AS A YOUNG GIRL COMING HOME FROM A NIGHT OUT, I WAS CAUGHT IN THE CROSSFIRE OF BULLETS AND COMPLETELY TERRIFIED. HOW I GOT HOME ALIVE I'LL NEVER KNOW.'

'AS A NURSE I WAS FORCED TO WITNESS BROKEN NOSES, BOMB EXPLOSION INJURIES, EYE INJURIES WHERE PEOPLE HAD BEEN SHOT THROUGH THE EYES. EXPLOSIONS WHERE THERE WERE MULTIPLE INJURIES. IT WAS HORRIFIC.'

Among the overall follow-up sample 17.8% said they had experienced a 'man-made disaster' associated with the 'Troubles' (Table 6). The majority of descriptions of this type of traumatic event focused on experience of 'Troubles-related' bomb explosions, while a number of participants spoke about their experience of the burning of businesses and homes during the 'Troubles':

'A BOMB WENT OFF IN THE HOUSE OPPOSITE MY HOME. OUR HOME WAS BADLY DAMAGED AND THE OTHER HOUSE WAS ALSO BADLY DAMAGED. IT WAS A VERY DRAMATIC TIME. MY BABY WAS ONLY 6 WEEKS OLD AT THE TIME AND I WAS AT HOME ALONE WITH HER.'

'IN 1976 A BOMB EXPLODED IN A BAR ... AS I HAD JUST LEFT THE PREMISES. MY HUSBAND AND MOTHER WERE STILL INSIDE. TWO PEOPLE WERE KILLED AND 30 PEOPLE INJURED.'

Almost 13% of the participants in the study said they had been 'mugged or threatened with a weapon' related to the 'Troubles' (Table 6). Individual experience of this event type included being held at gunpoint, hijacked, detained and threatened:

'SECURITY FORCES DETAINED US COMING OVER THE BORDER AND WE WERE HELD FOR ABOUT 8 HOURS AND WE WERE THREATENED WITH MURDER, ASSASSINATION.'

'I WORKED IN AN OFF-LICENCE IN MY TWENTIES. WE WERE HELD UP SEVERAL TIMES AND THE MEN WERE ARMED WITH BARS, KNIVES AND GUNS. I HAD A GUN HELD TO MY HEAD. WE WERE HELD UP EVERY FEW MONTHS ESPECIALLY IN THE DARK NIGHTS.'

Table 6 also indicates that 6.3% of individuals in the follow-up sample experienced another 'Troubles-related' event that was not previously mentioned in the list of possible traumatic event types. Again the experiences described by participants of 'other events' varied substantially from experiences of being shot at or witnessing shooting during the 'Troubles', to the experience of eviction from the family home. Another participant described how the 'aftermath of the Enniskillen bomb' was particularly traumatic.

'I WAS SHOT AT ONE NIGHT AFTER LOCKING UP AT WORK.... IN BELFAST. I WAS APPROACHED BY A HOODED MAN. SOMEONE IN THE CAR SAID SOMETHING TO HIM AND HE GOT INTO THEIR CAR AND DROVE OFF. I FEEL IT MAY HAVE BEEN MISTAKEN IDENTITY.'

'SHOOTING OF CLOSE COLLEAGUES AND WITNESSED INJURIES (DETAILS OF TERRIBLE INJURIES OMITTED BY RESEARCH TEAM). I HAVE NEVER FORGOTTEN THIS.'

SECTION B

RESULTS FROM THE FOLLOW-UP STUDY

As described earlier, previous reports produced by the research team based on data from the NISHS did not include 'unexpected death of a loved one' in the categorisation of 'conflict-related' events, given the lack of information on the circumstances of these events. The follow-up study found that almost 6% of participants experienced 'unexpected death of a loved one' as a result of the 'Troubles'. Two of these personal experienced are described below:

'MY BROTHER .... WAS SITTING AT HIS DESK WHEN THREE MEN ... ASKED FOR HIS NAME. THEY SHOT HIM [MULTIPLE TIMES] AND KILLED HIM.'

'MY SISTER-IN-LAW WAS STANDING AT HER FRONT DOOR WHEN A BOMB WENT OFF IN A CAR; SHE WAS KILLED INSTANTLY.'

IMPACT OF THE 'TROUBLES' ON PARTICIPANTS' LIVES

The 149 participants who experienced a 'Troubles-related' traumatic event were asked additional questions about the impact of the 'Troubles' on different aspects of their lives. Results relating to these questions are summarised in Table 7. For example almost 13% of individuals who experienced a 'Troubles-related' traumatic event stated that they had to move home or place of residence as a result of their experience, while just over 11% were physically injured as a result of their experience.

Table 7:
Impact of the 'Troubles' on the participants' life (n=149)

	% of those who experienced a 'Troubles-related' trauma	N
Did you lose your job or business as a result of your experience?	4.0	6
Were you physically injured as a result of your experience?	11.4	17
In your opinion do you have a physical health condition as a result of your experience?	7.4	11
Did you ever have to move to a different home or place of residence as a result of your experience?	12.8	19
Were you ever imprisoned, interned or charged with an offence associated with the 'Troubles'?	2.0	3

EXPERIENCE AND IMPACT OF FEAR ASSOCIATED WITH THE 'TROUBLES'

Participants who experienced 'Troubles-related' trauma were presented with a series of statements about the experience of fear during the 'Troubles' and asked to indicate their level of agreement on five point 'Likert scale'. Table 8 below summarises responses to these statements in terms of their level of agreement. Over half of individuals who experienced 'Troubles-related' trauma (53.6%) agreed or completely agreed that they were sometimes afraid because of their religious identity. Over 80% of individuals agreed or completely agreed that they were 'sometimes careful of what they said', 'sometimes avoided places and people where they felt unsafe' and 'were sometimes afraid when there were acts of violence.' In contrast, just over 13% said they 'felt uncomfortable going to a church or chapel of the other tradition.'

Table 8:
Prevalence of fear among study participants (n=149)

	Disagree or completely disagree (% of respondents)	Neither agree or disagree (% of respondents)	Agree or completely agree (% of respondents)
I was sometimes afraid in certain situations because of my religious identity	34.3	12.1	53.6
I sometimes felt I did not fit in because of where I came from	50.4	8.7	40.9
I sometimes felt afraid at times in certain places or with certain people	21.5	5.4	73.1
I was sometimes careful of what I said	6.7	4.0	89.3
I sometimes avoided places and people I felt unsafe with	13.4	4.7	81.9
I sometimes did not know whether I should trust someone	20.8	10.1	69.1
I sometimes felt uncomfortable in a mixed gathering	39.6	20.1	40.3
I sometimes felt uncomfortable going to a church or chapel of the other tradition	71.8	14.8	13.4
I sometimes felt afraid when there were acts of violence	9.4	6.7	83.9
I sometimes felt afraid or upset when there were some political events or developments	18.8	13.4	67.8

SERVICE USE

One of the main aims of the current study was to determine the level of services use among individuals with 'Troubles-related' mental health needs. Individuals in the follow-up study that said they had experienced at least one lifetime 'Troubles-related' traumatic event (n=149) were therefore asked a series of questions relating to their use of services in relation to their experience(s). Table 9 below indicates that just over 14% of individuals who experienced at least one 'Troubles-related' traumatic event ever sought help following their experience, while an overwhelming majority, 86% never sought help.

Table 9:
Percentage of individuals that experienced Trouble-related trauma that sought help (n=149)

	% who "ever sought help following 'Troubles-related' trauma"	N
Yes	14.09	21
No	85.91	128
Total	100	149

SECTION B

RESULTS FROM THE FOLLOW-UP STUDY

Combing the data on 'Troubles-related' service use collected in the follow-up study with previous data on mental health disorders from the original NISHS reveals that the 21 individuals that sought help met the criteria for at least one mental health condition during their lifetime. Analysis also reveals that of the 149 individuals that experienced a 'Troubles-related' traumatic event, 88 individuals met the criteria for at least one lifetime mental health disorder. This means that 67 individuals or 76% of those who experienced a 'Troubles-related' event and had an identifiable mental health condition did not seek help, again suggesting that there may be substantial levels of unmet need among this population.

Participants who experienced 'Troubles-related' trauma were also asked if they were ever prescribed medication for emotional problems associated with the 'Troubles'. Table 10 indicates that the just over 14% said that they had, while 86% had not.

Table 10: Impact of the 'Troubles' on the participants' life (n=149)	% who were ever prescribed medication for 'Troubles-related' emotional problems	N
Yes	14.09	21
No	85.91	128
Total	100	149

TYPES OF SERVICES USED BY INDIVIDUALS WHO EXPERIENCED 'TROUBLES-RELATED' TRAUMA

Participants who said that they had sought help following their experience of 'Troubles-related' trauma (n=21) were asked about the types of health professional or other professional they had visited and whether they felt this source of help was effective. Table 11 summarises this information. Almost all those that sought any help had visited their GP or family doctor (95.2%, n=20), while almost two thirds visited a psychiatrist (61.9%, n=13) and 42.9% (n=9) saw a psychologist. While interpretation of results is limited due to the small numbers included in the analysis, for each service provider the majority of individuals found the help that they received effective. For example, almost 78% of those that visited a psychologist and 77% of those that visited a psychiatrist found the help they received effective.

Table 11: Visits to service providers among individuals that sought any help following their experience of 'Troubles-related' trauma (n=21)	Yes (% among those who sought any help i.e. n=21)	N	Effective (% of those who sought help from this provider)	N
Psychiatrist	61.9	13	76.9	10
GP or family doctor	95.2	20	70.0	14
Any other medical doctor, like a cardiologist or (women: gynaecologist/ men: urologist)	28.6	6	66.7	4
Psychologist	42.9	9	77.8	7
Social worker	9.5	2	100	2
Counsellor	38.1	8	100	8
Any other mental health professional, such as a psychotherapist or mental health nurse.	28.6	6	83.3	5
A work-based occupational consultant, nurse or other health professional		23.8	5	80.0
A religious or spiritual advisor like a minister, priest or rabbi.	14.3	3	66.7	2
Any other healer, like a herbalist, chiropractor, or spiritualist	4.8	1	100	1
Other source of help	4.8	1	100	1

As well as visits to various professionals, participants who had sought help were also asked about the types of therapy that they had ever received. Again, this analysis was limited by small numbers but results are presented in Table 12. For example 38% of those who sought help had person-centred counselling while 14% had Cognitive Behavioural Therapy and 10% psychotherapy.

Table 12: Types of therapy received by individuals following their experience of 'Troubles-related' trauma (n=21)	% amongst those who sought any help i.e. n=21	N
Person centred counselling	38.1	8
Psychotherapy	9.5	2
Family therapy	4.8	1
Cognitive Behavioural Therapy (CBT)	14.3	3
Eye Movement Desensitisation and Reprocessing (EMDR)	0	0
Other treatment	4.8	1

REASONS FOR SEEKING HELP

The 21 individuals who said they had sought help for their emotional problems associated with the 'Troubles' were subsequently asked to comment on their reasons for seeking help. The reasons that most people provided for seeking help centred around problems with anxiety and depression following their experience, while one individual talked about suffering from suicidal thoughts:

'APART FROM THE PHYSICAL DAMAGE, I SUFFERED DEPRESSION FOR A WHILE.'

'DOCTORS RECOMMENDING THAT I ATTEND A PSYCHOANALYST BECAUSE I HAD SUICIDAL THOUGHTS.'

Participants were also asked to describe in more detail the specific emotional problems that they had following their experience. Some individuals talked of being continually upset and worried about what would happen next:

'CRYING ALL THE TIME AND DEPRESSED, CONSTANTLY WORRIED ABOUT THE KIDS. ALWAYS EXPECTING TROUBLE IN THE AREA.'

'I WAS UNCONTROLLABLY UPSET AND EMOTIONALLY SPENT, I SUPPOSE.'

'NERVOUS, AFRAID. I HATED GOING UP THE STREET. I DIDN'T WANT TO PASS WHERE IT HAPPENED.'

SECTION B

RESULTS FROM THE FOLLOW-UP STUDY

Others described their experience of flashbacks, a prominent feature of post traumatic stress disorder:

'FLASHBACKS AND THINKING IT COULD BE ME THE NEXT TIME.'

'I WAS DEEPLY CAUGHT UP AND GOT FLASHBACKS TO THE EVENT OF SEEING THE MUTILATED BODY OF THE (PERSON) AFTER THE EXPLOSION.'

Similar to findings from qualitative interviews described in Trauma, Health and Conflict (Ferry et al., 2008), a number of individuals spoke about physical health problems associated with experience of 'Troubles-related' trauma:

'ONGOING DEPRESSION, I WAS UNABLE TO SOCIALISE AND COULDN'T GO OUT OF THE HOUSE FOR QUITE SOME TIME. I WAS WORRIED CONSTANTLY ABOUT MY FAMILY, ESPECIALLY MY MOTHER WHO WAS HURT AT THE TIME AND TOOK ARTHRITIS OUT OF THAT. I WAS PREGNANT AT THE TIME AS WELL.'

REASONS FOR NOT SEEKING HELP

As indicated in Table 9, the majority of participants who experienced 'Troubles-related' trauma did not seek help (86%, n=128). In the follow-up interview these individuals were presented with a number of potential reasons for not seeking help and asked whether each was a factor in their decision. Responses to these questions are summarised in Table 13. The most frequently endorsed reason for not seeking help was that participants did not think they needed help, with two-thirds stating this as a reason. Over 17% said that they did not know what was wrong with them while just over 16% did not know where to get help.

| **Table 13:** **Reasons why individuals did not seek help following their experience of the 'Troubles' (n=128)**	% of those that did not seek help (n=128)
I did not think I needed help	66.4
I did not know what was wrong with me	17.2
I was concerned what people would think if they found out I was in treatment	7.8
I did not know where to get help	16.4
I did not know who to trust	11.7
I was afraid for my own or my family's safety	14.8
I could not afford to pay for service	4.7
I could not afford to take time off work	10.2
I was afraid that if I sought help, things would get worse	7.8
Other	10.2

IMPACT OF POLITICAL AND OTHER DEVELOPMENTS

The final section of the interview asked participants about their level of engagement or interest in Northern Ireland politics on a five-point scale. In the first instance individuals were asked to what extent they were engaged or interested in Northern Ireland politics prior to their traumatic experience associated with the 'Troubles' and then asked about their level of engagement after their experience. Reponses to these two questions are summarised in Table 14.

Results reveal that prior to participants' experience of trauma, the majority were either not engaged or completely disinterested in politics with just around 11.5% either engaged or extremely engaged. These patterns of responses however shifted notably when individuals were asked about their level of interest after their experience. Specifically the percentage of participants who were not engaged or extremely disinterested decreased substantially while the percentage who said they were engaged increasing two fold. These patterns of responses are also illustrated graphically in Figure 9.

Figure 9:
Level of political engagement prior to and after participants' experience of 'Troubles-related' trauma

Legend: Completely Disinterested, Not Engaged, Indifferent, Engaged, Extremely Engaged
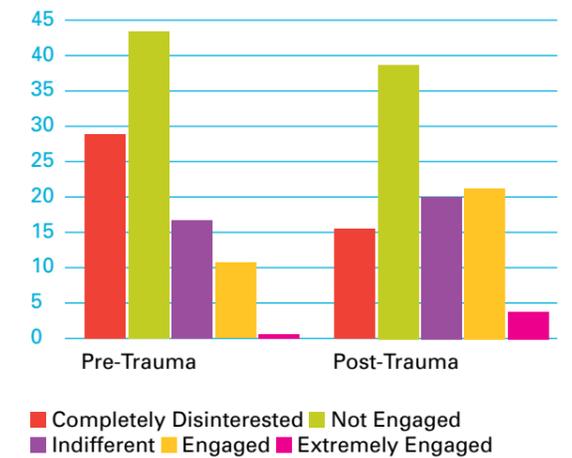
Table 14: **Level of political engagement prior to and after participants' experience of 'Troubles-related' trauma.**	Completely disinterested %	Not engaged %	Neither/ indifferent %	Engaged %	Extremely engaged %
Prior to 'Troubles-related' traumatic experience	28.2	43.6	16.8	10.8	0.7
After 'Troubles-related' traumatic experience	16.1	38.3	20.8	21.5	3.4

Participants were subsequently asked about the extent to which their experience of the 'Troubles' had an impact of various aspects of their lives including religion, family relationships, other relationships and priorities in life. Table 15 summarises the patterns of responses on a scale from 1 to 5 where 1 represents 'no impact' and 5 represents 'major impact'. Over two thirds of participants who experienced 'Troubles-related' trauma felt that their experience had no impact on their religion, family relationships or other relationships, with a minority stating it had a major impact on their aspects of their life. Priorities in life however were to some extent affected by individuals' experience of the 'Troubles' with around 31% stating that it had an impact to some degree.

Table 15: **Level of impact of 'Troubles-related' trauma on various aspects of participants' lives (n=149)**	1 (No impact, %)	2 (%)	3 (%)	4 (%)	5 (Major impact, %)
Religion	68.5	8.1	12.8	4.7	6.0
Family relationships	63.8	5.4	14.8	6.0	10.1
Other relationships	67.1	6.0	16.8	5.4	4.7
Priorities in life	38.9	12.1	18.1	19.5	11.4

SECTION B

RESULTS FROM THE FOLLOW-UP STUDY

Finally, participants were asked about the extent to which they felt their community has changed since their experience of the 'Troubles' to the present day. Overall around 56% of participants felt that their community had changed to some degree, while almost 15% felt that their community had not changed at all. The results are in Table 16.

Table 16:
Level of impact of 'Troubles-related' trauma on various aspects of participants' lives

	1 (Not at all, %)	2 (%)	3 (%)	4 (%)	5 (Dramatically, %)
Extent to which community has changed	14.8	5.4	24.2	28.9	26.9

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PERSONAL EXPERIENCE OF THE IMPACT OF THE 'TROUBLES' ON KEY ASPECTS OF LIFE

In addition to the quantitative questions about the impact of 'Troubles-related' traumatic experiences on key areas of life, individuals who had experienced these types of events (149 out of the total sample of 225) were invited to provide more detailed descriptions of their personal experiences. Specifically, individuals were asked to describe:

Political developments that had an impact on their wellbeing.

How their experience of 'Troubles-related' trauma had an impact on:

• Religion
• Family relationships
• Other relationships
• Priorities

Participants were also asked if they had any further comments or anything they wished to add regarding their experience of traumatic events associated with the Troubles.

The impact of political developments on wellbeing

Just over one third of participants provided qualitative descriptions of the impact of political developments on their wellbeing, reporting incidents or developments that had impacted upon them either positively or negatively.

The range of negative events was much more individualistic than the positive events. The most cited such events or developments were the Ulster Workers Council Strike (1974) and Bloody Sunday (1972). Other respondents cited examples such as the Omagh bombing (1998), having to emigrate, disbandment of the Royal Ulster Constabulary (RUC) and the collapse of the Sunningdale Agreement (1974).

In terms of events or developments that had positive impacts all of the responses given referred to events and developments associated with the peace and political processes of the 1990's including the ceasefires of the early and mid 1990's, the Good Friday (Belfast) Agreement (1998), political developments, the subsequent opening of Stormont or establishment of the NI Legislative Assembly, the release of prisoners. The efforts by politicians to commence political dialogue were noted by some participants as being beneficial.

Impact on participants' religion

Some respondents indicated that the 'Troubles' had not impacted upon their religion at all or very much

Two participants reported that the 'Troubles' had caused problems in attending church. Others felt their religious identity had:

• Increased their visibility and therefore caused them concern;

• Because of their identity would cause them to be identified with perpetrators of violence;

• Caused them concern about where they went;

• Increased their segregation from the other community.

Fifteen described how their experiences had caused them to reflect and think about their religious faith. Of this group, some experienced doubt about the beliefs they had held, some were drawn closer to their church or faith, others responded by becoming more open minded, becoming less religious, reflecting more, or stopped going to church. Others felt disillusionment with religious or church leaders. Three changed their religion (two to non-Christian faiths; the other not specified).

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Impact on family relationships

The impact on family relationships could be summarised in a few words; worry, fear, tension, cohesion. Parents worried about children; siblings about their brothers and sisters. Spouses (mainly wives) worried about their husbands especially where they were involved in some way in the 'Troubles'. Fear of being caught up in violence, anxieties by parents about children being involved in street disturbances were reflected in the comments. Tensions within families were often noted, leading to rows, impaired relationships and sometimes separation of spouses. Participants also reflected the drawing together of families to reduce risk and fear.

'I SUPPOSE IT REALLY BOTHERED ME ABOUT HOW MUCH MY MOTHER WAS CONCERNED ABOUT THE 5 OF HER CHILDREN. I THINK THAT IS WHAT KILLED MY MOTHER IN THE END, THE CONSTANT WORRY ABOUT US, ME BEING CAUGHT IN CROSS FIRE, MY BROTHER AND FATHER SEEING MUTILATED BODIES, LIMBS AND OTHER BODY PARTS. IT WAS A BAD TIME FOR ALL OF US AND MY MOTHER 'FUSSED' OVER US, LIMITED WHERE YOU WENT AND WHO YOU WERE WITH. SOMETIMES BEING SO YOUNG WE DIDN'T SEE OR UNDERSTAND WHERE SHE WAS COMING FROM. THERE WAS OFTEN CONFLICT AND WORRY BETWEEN MY MOTHER AND I ABOUT WHERE I WAS GOING AND WHO I WAS WITH.'

Impact on Other relationships

Responses to the question relating to the impact of the 'Troubles' on other relationships reflected the distancing and mistrust that followed the onset of violence. Relationships became more superficial, and were characterised by low levels of trust or increased mistrust, isolation from the other community to one degree or another, adverse consequences for social and working relationships, and general caution about going to other places and forming relationships. A group of respondents described how they were able to get on with members of the other community and how they strove to ensure their relationships were not impaired by the conflict.

'I WORRIED A LOT ABOUT MY FRIENDS, ESPECIALLY MY GIRLFRIEND. WE COULD NOT SOCIALISE OUTSIDE OUR OWN AREA AND WE WERE VERY RESTRICTED. THERE WERE CONSTANT ROAD BLOCKS BY SECURITY FORCES AND YOUNG PEOPLE JUST DIDN'T GET THE FREEDOM THEY NEEDED TO GET AROUND AND MEET OTHER PEOPLE, ESPECIALLY FROM THE OTHER DENOMINATIONS. I REALLY FEEL THAT IF YOUNG PEOPLE HAD BEEN ABLE TO SOCIALISE BETWEEN CATHOLICS AND PROTESTANTS THINGS WOULD HAVE BEEN A LOT BETTER TODAY. THE TROUBLES WOULD NOT HAVE LASTED AS LONG.'

SECTION B

RESULTS FROM THE FOLLOW-UP STUDY

Impact on personal priorities

By far the greatest response from those who had experienced 'Troubles-related' violence reflected concerns for, hopes for or refocused priorities towards their children and family. Some indicated their experiences had major or serious consequences. Others remarked upon how their experiences had in some fundamental way caused them to rethink their lives, their priorities, the value of life etc. Fear and safety were major themes along with relief that the Troubles were 'over' and hopes for the future:

'IT HAS MADE ME MUCH MORE CARING ABOUT THE PEOPLE I LOVE. MY PRIORITY IS THE PEOPLE IN MY LIFE AND LOOKING AFTER THEM AND PROTECTING THEM. IT IS ALSO REFLECTED IN THE WAY I BROUGHT UP MY CHILDREN, IN TEACHING THEM TO RESPECT OTHER PEOPLE. NOT ONLY DID MY OWN PRIORITIES CHANGE BUT ALSO THE PRIORITIES I INSTILLED IN MY CHILDREN.'

Other comments

Over a third of those who had experienced traumatic events associated with the 'Troubles' took the opportunity to add further to their responses in this final question. The responses and comments could be summarised as follows:

- Hopes/hopeful for the future;
- General regrets about the past, why the 'Troubles' happened etc.
- Specific unhappy or distressing memories of personal experiences of violence, the conflict etc.
- Relief, reduction in fear and anxiety since the cessation of the main periods of violence and political progress;
- Regrets over not having access to psychological help in the past or currently; the current need for psychological help.

Others indicated that they had had no personal experiences of the conflict or were not affected by it. Some, reflecting the concerns of a small proportion of respondents, were concerned that the 'Troubles' were not over yet, and had a desire for the conflict to be ended once and for all.

Another small proportion thought that, in terms of relationships, mistrust or community spirit, the 'Troubles' had made things worse.

'I THINK IT WAS A TERRIBLE WASTE OF LIFE. … I DON'T UNDERSTAND HOW IT WAS ALLOWED TO HAPPEN AND HOW PEOPLE COULD DO THE THINGS THEY DO TO ONE ANOTHER. TO GO OUT AND KILL SOMEONE IN COLD BLOOD. IT IS JUST TERRIBLE.'

DISCUSSION OF SECTION B RESULTS

In Section B the key findings from a more detailed follow-up study with a sub-sample of 225 people aged 45 years or more, who had had a traumatic experience, are presented. This provided the opportunity to explore in more detail the nature of people's traumatic experiences.

The following areas were explored with participants.

1. Experiences of lifetime traumatic events.

2. Experiences of 'Troubles-related' traumatic events.

3. Impact of the 'Troubles' on participants' lives.

4. Experience and impact of fear associated with the Troubles.

5. Service use.

6. Reasons for seeking help.

7. Reasons for not seeking help.

8. The impact of political and other developments.

9. Personal experiences of the impact of the Troubles on key aspects of life including:

   - Well-being;

   - Religion;

   - Family relationships;

   - Other relationships;

   - Personal priorities.

10. Other comments or observations participants wished to make.

Experience of traumatic events including those associated with the Troubles

The follow up study provided a unique opportunity to explore in more detail what trauma event types from the original research instrument (which did not include questions relating to the 'Troubles') were 'Troubles-related'. This study confirmed that the trauma event types deemed by the research team to be most likely Troubles related were highly relevant to the experience of participants. Further, event types that had not been included by the research team in the short list of Troubles related event types were also indicated by participants as 'Troubles-related' experiences.

In addition, this part of the study provided a valuable insight into the proportion of those who had suffered the sudden death of a loved one whose loss was associated with the 'Troubles' (11.9% of all experiences of sudden death of a loved one), and of the impact of trauma to a loved one (40.0% of all such experiences). Previously, it had not been possible to determine what these proportions were and so these event types, which were undoubtedly frequently experienced, were omitted from the short list of 'conflict-related' event types (defined from the NISHS data) and therefore not part of the assessment of the impact of the 'Troubles', in earlier studies. With caution about extrapolating the findings from this smaller study to the larger data set, this study gives an insight to the possible levels of such events linked to the 'Troubles'.

This follow-up study also revealed that no participant reported sexual assault, child abuse or domestic violence as events associated with the 'Troubles', supporting the view that such events were not instrumental means of violence deployed in the years of violence for reasons linked to the civil conflict. This does not exclude the possibility that such experiences were secondary to 'Troubles' events and their consequences.

DISCUSSION OF
SECTION B RESULTS

Impact of the 'Troubles' on participants' lives

In this part of the study 149 participants who had experienced a 'Troubles-related' traumatic event were asked about the subsequent impact on key areas of their lives. The details are summarised in Table 7, above. Of note is the 13% (of those who had experienced a 'Troubles-related' event) who reported that as a result they had to move home. More than one in ten indicated they were injured as a result of their experience (11.4%). (A similar question put to members of the public including those presumably who had not had a 'Troubles-related' traumatic experience in a recent study commissioned by the Commission for Victims & Survivors NI found that 6% had suffered physical injury. (NISRA, 2010))

In the current study, 7.4% said they had suffered physical ill health as a result of their experience(s). Four per cent lost their job or business. Two per cent were imprisoned, interned or charged with an offence associated with the 'Troubles'.

This profile reinforces the argument for looking at the wider range of impacts on people's lives to take account of the practical impacts and consequences of people's experiences. Of relevance to this age group (45 year and older) is the challenge of coping with serious injuries as one gets older, and of the need for care and services.

The experience and impact of fear associated with the 'Troubles'

The research team was aware of studies, which indicated that mental health disorders arising from conflict related experiences were not ameliorated by political changes. (e.g. Basoglu et al, 2005). Basoglu et al. had concluded, "PTSD (post traumatic stress disorder) and depression in war survivors appear to be independent of a sense of injustice arising from perceived lack of redress for trauma. Fear of threat to safety and loss of control over life appeared to be the most important mediating factors in PTSD and depression."

In the current study the intention was to explore the degree to which people felt fear and to begin to assess to what degree worsening of

fear exacerbated mental health problems, and conversely, whether reductions in fear brought about improvements. In this Report, the experience of fear has been described above and summarised in Table 8.

As illustrated in response to later questions, fear and safety were major themes in the lives of those who had experienced 'Troubles-related' traumatic events. This was particularly so in terms of the caution people exercised over what they said, the level of fear felt following acts of violence, and in places which, or with people who, caused anxieties about safety. Adverse political developments (as perceived by participants), uncertainty about who to trust and anxieties about one's religious (cultural) identity also featured significantly as vectors of fear and concerns about safety.

These findings will hardly surprise those who have lived in Northern Ireland, especially during the years of violence. What this study has tried to do is to articulate the specific levers of fear and anxiety about safety and to obtain a sense of which issues seemed to play the greatest role in inducing fear etc. and their relative magnitude.

Service use

In this part of Section B there is a lengthy exploration of the patterns of service access and usage by the 149 participants who had had a 'Troubles-related' traumatic experience.

One of the areas explored was the reasons why some people (of which there were 128) did not seek help following traumatic experiences associated with the 'Troubles' (see Table 13).

Most (two thirds) did not seek help because they thought they did not need any help. The fact that many people do not seek help should itself not be a surprise as most people who have a traumatic experience do not develop a post trauma mental health disorders.

Other reasons given were relevant to the task of ensuring people (even at this stage in the history of the years of violence) have ready and routine access to relevant services, including those aimed at

These other reason included:

Information about services	• Not knowing where to get help
Clinical, disorder or symptom related issues	• Not knowing what was wrong with me
	• Afraid that if I sought help things might get worse
Fear and safety concerns	• Afraid for my own or family's safety
	• Not knowing whom to trust
	• I was concerned what people would think if they found out I was in treatment
Practical and financial concerns	• Could not afford to take time off work
	• I could not afford to pay for a service

The impact of political and other developments

In the context of the detailed observations made by participants in subsequent parts of the study, the finding that people became more engaged with politics is perhaps not surprising. The deeply felt changes in people's outlook on life and their re-evaluation of their lives, values, priorities etc. following traumatic experiences associated with the 'Troubles', is very clear. Given the association of the civil conflict with politics it might be expected that for some, one of their responses would be to at least take a greater interest in what is going on in the political world, if not to actually get involved in politics.

Personal experiences of the impact of the 'Troubles' on key aspects of life

The personal experiences and impact of the 'Troubles' on key aspects of people's lives have already been described in some detail and illustrated with the words of participants. Drawing together the quantitative findings with the comments of participants it is possible to better understand the nature of the consequences of people's experiences. Reassuringly, most felt key areas of their lives had not been unduly affected by their 'Troubles-related' experiences. To the extent that people's religious beliefs and practices were affected, qualitative information provided by individuals in the follow-up study suggests some were drawn more to their faith and practice; others distanced themselves from religion, following traumatic experiences.

For some, family life was profoundly affected by anxieties about safety, particularly of children. People feared more for their family members and friends, than for themselves. Political progress had the important effect of reducing fear and concerns about safety. Other relationships were sometimes and enduringly affected by loss of trust, and again the political stability and improvements have resulted in progress in wider relationships.

There was a large response to the final two questions in the study with very clear thoughts about the past and the future. The prevailing comments reflected regrets about what had happened, the yearning for peace, relief at the progress that has been made and hopes for the future. Interwoven amongst these thoughts were strong feelings about and hopes for respondents' children, family and community. There was clear evidence of deep personal experiences and impacts of violence on participants, their view of the world, their family and other relationships. Significant positive transformations in self-perceptions, values, personal priorities and world-view were often reflected in the comments.

Whilst this is an encouraging picture, the remaining and enduring needs of those who have not been able to overcome their experiences, is also found in the comments, along with regrets about events and circumstances associated with the Troubles, missed opportunities, broken personal and community relations and generally, about the futility of violence. There remains, too, clear evidence of grief and trauma, some of which has not been resolved and for which some respondents feel they, even yet, need assistance and services.

APPENDIX 1
METHODOLOGY

STUDY DESIGN: A TWO-PHASED APPROACH

As previously described, this project is one in a series of follow-up studies to the Northern Ireland Study of Health and Stress (NISHS), which is the largest epidemiological study of mental health and behavioural disorders in Northern Ireland based on validated diagnostic criteria. The current study adopted a two-phased approach, with the first being an analysis of data from the NISHS relating to the experience and mental health impact of psychological trauma among the adult population aged 45 and over. The second phase involved analysis of follow-up interviews with a sample of individuals from the NISHS aged 45 and over who experienced a 'conflict-related' traumatic event, to gain a deeper insight into the direct impact of 'Troubles-related' trauma on this sub-population. A more detailed description of both study phases is provided below.

Ethical approval

Ethical approval for the study was obtained from the University of Ulster Research Ethics Committee.

PHASE 1:
ANALYSIS OF DATA FROM THE NORTHERN IRELAND STUDY OF HEALTH AND STRESS

THE NISHS

Detailed descriptions of the NISHS, associated sampling framework, survey instrument and other methodology have been provided in previous publications by the research team (Bunting et al., 2011; Ferry et al., 2011; Ferry et al., 2008). To recap briefly, the NISHS is the largest epidemiological study of mental health in Northern Ireland. This study, which involved a representative sample of 4,340 adults (aged 18 and over), is part of the World Mental Health (WMH) Survey Initiative, a series of standardised surveys which have investigated the prevalence and correlates of a range of mental, behavioural and substance disorders according to validated diagnostic criteria, as well as levels of service use and risk factors in 30 countries around the world. Participants in the NISHS were selected from a multi-stage area probability sample of households based on the 2001 Census, beginning with a random selection of wards, then Census output areas and households. With particular relevance to the current study, 2,315 participants in the NISHS were aged 45 or older.

SURVEY INSTRUMENT USED IN THE NISHS

All studies involved in this Initiative used a standardised survey instrument, namely the World Mental Health Composite International Diagnostic Interview (WMH-CIDI) version 3.0 (Kessler & Üstun, 2008), which contains 22 diagnostic sections assessing the prevalence of mood, anxiety, substance use and impulse control disorders according to standard validated criteria as outlined in the Diagnostic and Statistical Manual of Mental Disorders version IV (DSM-IV; American Psychiatric Association, 1994). The WMH-CIDI contained two sections. Section 1 included a screening section and

assessment of 'core disorders' such as depression and general anxiety. This section was administered to all 4,340 participants (2,315 aged 45 and over). Section 2 included questions about risk factors, service use and assessments of additional disorders such as PTSD. This section was administered to 1,986 of the total NISHS sample.

With particular relevance to the current research project, participants in the NISHS were asked a series of questions relating to their lifetime experience of traumatic events in the PTSD section of the WMH-CIDI. In the first instance, individuals were presented with a standard list of 28 potential traumatic life events and asked whether they had ever experienced any during their lifetime. Individuals who endorsed any of these events were subsequently asked a series of follow-up questions about symptoms relating to PTSD. Due to the standardised format of the survey instrument used in the NISHS and all WMH surveys, this section eliciting information on traumatic life events did not include questions specifically related to the 'Troubles' in Northern Ireland. Previous reports and papers investigating the impact of civil conflict in Northern Ireland based on NISHS data were therefore based on the subjective assessment of the research team on whether these event types were likely to be 'conflict-related' (Ferry et al., 2011; Ferry et al., under review).

It is worth noting at this point that PTSD is a unique marker for indicating the adverse mental health impact of traumatic events. While other mental health conditions may arise in association with experience of traumatic events, PTSD is a unique disorder given that the diagnostic criteria stipulate the condition must be preceded and directly linked to a traumatic stressor (APA, 2000). The current study examined the experience of traumatic events among the older population and considered the mental health impact by analysing the association of a range of mood, anxiety, substance use and impulse control disorders.

Other relevant information from the NISHS includes prevalence information for a range of mental and behavioural disorders, namely anxiety disorders (panic disorder, generalised anxiety disorder (GAD), social phobia, specific phobia, agoraphobia without panic, posttraumatic stress disorder (PTSD) and separation anxiety disorder/adult separation anxiety (SAD/ASA)); mood disorders (major depressive disorder (MDD), dysthymia and bipolar disorder); impulse control disorders (oppositional-defiant disorder (ODD), conduct disorder, attention-deficit/ hyperactivity disorder (ADHD) and intermittent explosive disorder (IED)); and substance use disorders (alcohol abuse, drug abuse, alcohol dependence, drug dependence).

In addition, the NISHS included a section on the use of services for problems with emotions, nerves and mental health. Participants in the NISHS were asked if they had ever seen a professional for 'problems with emotions, nerves, or use of alcohol or drugs'. Individuals who said that they

had seen a professional were provided with a list of professionals and asked which they had spoken to during their lifetime and in the year previous to the interview. This list included mental health specialists such as psychiatrists and psychologists, general practitioners, counsellors, social workers, other medical professionals, religious and spiritual advisors and complementary and alternative therapists.

The NISHS also assessed the lifetime prevalence of chronic physical health conditions. Individuals were presented with a range of physical health problems such as cardiovascular conditions, respiratory conditions, diabetes, pain conditions and cancer among others, and asked whether they had any of these conditions during their lifetime. This information was used to examine the association between trauma experiences, PTSD and adverse physical health conditions.

PHASE 2:
FOLLOW-UP STUDY TO EXAMINE THE EXPERIENCE AND IMPACT OF 'TROUBLES-RELATED' TRAUMA

FOLLOW-UP INTERVIEWS; SELECTION OF PARTICIPANTS

As previously outlined, the second aspect of the current study involved follow-up interviews with individuals from the NISHS, aged 45 and older to gain a deeper insight into the experience and impact of trauma specifically associated with the 'Troubles' in Northern Ireland. Potential participants for the follow-up study were identified from the NISHS dataset.

To maximise the group who were likely to have experienced 'conflict related' events the research team identified individuals in the NISHS who had experienced traumatic event types that were characteristic of events associated with the 'Troubles'. For example, event types such as 'serious illness' or 'car accident' were omitted.

Specifically individuals who were aged 45 years or older at the time of the NISHS interview, who agreed to take part in future studies and who indicated that they had experienced one of the following events were eligible to participate in the follow-up study: 1) combat experience; 2) relief worker in a warzone; 3) civilian in a warzone; 4) civilian in a region of terror; 5) refugee; 6) kidnapped; 7) man-made disaster; 8) beaten by someone other than a parent or partner; 9) mugged or threatened with a weapon; 10) unexpected death of a loved one; 11) trauma of a loved one; 12) witnessed someone being killed or seriously injured; 13) purposely killed, injured or tortured; and, 14) saw atrocities.

Preparatory analysis of NISHS data suggested that 508 individuals met these inclusion criteria.

It should be noted that in previous papers (Ferry et al., 2011; Ferry et al., under review), 'unexpected death of a loved one' and 'trauma of a loved one' were not categorised as 'conflict related', as the research team could not determine definitively if these experiences were associated with the 'Troubles'. Participants in the NISHS who said they experienced these events were however included in the eligible sample for the current study given that the follow-up interviews provided us with an opportunity to explore what proportion of the sample had experienced these events in association with the 'Troubles'.

STRUCTURED INTERVIEWS

Full re-contact details (provided in the original NISHS) were retrieved for 425 of the 508 eligible participants.

These 425 individuals received a participant information sheet by post from the main Research Associate at the University of Ulster. This provided details of the proposed study, invited participants to take part, explained what their involvement would entail, and how information provided by them would be used. In addition individuals were provided with contact details for the main researcher if they wished not to be involved in the study or had any other queries.

A total of 40 potential participants contacted the study researcher directly to state that they wished not to take part in the research, leaving a potential sample of 385 participants. Re-contact information for these 385 individuals was subsequently passed to the professional interviewing company (Ipsos MORI). A breakdown of this potential sample of 385 in terms of successfully completed and unsuccessful interviews is provided below:

Description of final interview status	Number
Successful interview	225
Refused	26
Unable to access block/ scheme/gated apartments 1	1
Occupied but no contact at address after 5+calls	11
Named respondent has deceased	15
Named respondent does not live at this address	21
Property vacant	3
Property derelict 2	2
Too ill	4
Away during fieldwork	6
Other reason	64
No Contact	3
Unknown	4

APPENDIX 1
METHODOLOGY

A total of 225 interviews were undertaken by trained professional interviewers from Ipsos MORI using a computerised version of the study interview. Before beginning each interview, the interviewer confirmed the details of the study with the participant and answered any questions raised. Once the participant was happy to proceed, informed written consent was requested. During the interview participants were asked questions about their experiences of 'Troubles-related' traumatic events; about the impact of these experiences on various aspects of their life; about their use of services in relation to mental health difficulties associated with these experiences; and about the impact of political events and other developments.

Information provided in the interviews was collated by the project manager at Ipsos MORI and a database of responses developed in SPSS format simultaneous to the data collection period. On completion, this anonymised dataset was passed back to the research team at UU and converted to Stata format (StatCorp, 2007) for analysis.

METHODS OF ANALYSIS

As previously indicated, the results presented in Section A are based on analysis of data from the NISHS, which included a total representative sample of 4,340 individuals. With specific reference to this research study, the sample of individuals aged 45 and over (at the time of the NISHS interview) included 2,315 individuals. All estimates presented in the current Report incorporated information on case specific weights and stratification. More details on sampling weights used in the NISHS can be found in other papers (Bunting et al., 2011).

The overall prevalence of lifetime experience of any traumatic event was determined by calculating the proportion of individuals who said they experienced at least one traumatic event during their lifetime. X^2 tests were used to compare the prevalence of traumatic exposure among those aged under 45 and those aged 45 and over.

Section A also presents estimates of the prevalence of 'conflict-related' trauma among those aged under 45 and those aged 45 and over. Again 2 tests were used to statistically examine differences in the prevalence of 'conflict-related' event types between these two groups.

The original survey instrument used in the NISHS did not include specific questions about traumatic events linked to the 'Troubles'. The research team therefore identified 'conflict-related' events, namely events types from the list of 28 types presented in the NISHS that were characteristic of the 'Troubles'. The following events were classified as 'conflict-related' if they were first experienced from 1968 onwards (1968 is the year from which much of the violence can be seen to have escalated): participated in combat; served as peacekeeper or relief worker in a place of war or terror; was an unarmed civilian

in a place of war; lived in a place of ongoing terror; was a refugee; was kidnapped or held captive; was in a man-made disaster; beaten by someone other than parents or partner; mugged or threatened with a weapon; witnessed someone being killed or seriously injured; purposely caused injury or death; saw atrocities. The overall prevalence of 'conflict-related' events was calculated as the proportion of NISHS participants (aged 45 and over), who experienced these event types from 1968 onwards.

Additionally, the prevalence of any 'conflict-related' event was also compared across key socio-demographic indicators including gender, marital status, income level and educational attainment. The categorisation of these variables has been described in previous publications (e.g. Ferry et al., under review)

In order to gain some understanding of the association of traumatic events with health outcomes among the older portion of the adult population, NISHS participants (aged 45 and over) were categorised into one of three trauma groupings depending on their experience of traumatic events:

• The first group included those who had not experienced any traumatic event during their lifetime.
• The second included those who experienced a traumatic event during their lifetime but not an event associated with conflict.
• The third group included individuals who experienced any 'conflict-related' traumatic event (as defined above);

Individuals in these three trauma categories were then compared in terms of the prevalence of a range of lifetime mental and physical health conditions.

Results in Section A conclude with an examination of the level of service use among individuals aged 45 and over who experienced a 'conflict-related traumatic event' and who had a lifetime mental health disorder. Information on service use was derived from the 'services' section of the NISHS, as described previously, and the prevalence of service use calculated as the proportion of this subgroup of individuals who visited a given service provider at any point in their lifetime. Once again, details of the categorisation of service providers can be found in previous publications (Bunting et al., 2011, Bunting et al., under review (b))

All analyses of NISHS presented in the current Report were carried out using Stata statistical software version 10.0 (StatCorp, 2007).

Results presented in Section B are based on information collected from the 225 individuals who participated in the follow-up study. These participants were again presented with the same 28 traumatic event types included in the NISHS and asked whether they had ever experienced

them during their lifetime. The prevalence of these events was therefore calculated as the proportion of the follow-up sample (n=225) that said they had experienced the relevant event type. Individuals who endorsed each event type were subsequently asked if they had experienced this event in relation to the 'Troubles' in Northern Ireland and the prevalence of 'Troubles-related' event types was therefore calculated as the proportion of the follow-up sample that said they had experienced each of the relevant event type in association with the 'Troubles'.

Individuals who had experienced at least one event type were subsequently asked a series of follow-up questions about the impact of their experience on different aspects of life, their experience of fear associated with the 'Troubles', service use for problems associated with their experience and the impact of political and other developments. Results from this series of questions are presented as percentages, representing the response patterns of individuals who experienced 'Troubles-related' trauma.

The follow-up study also included a number of open-ended questions to elicit more detailed information on the experience and impact of 'Troubles-related' trauma among the older population. Content analysis was used to analyse these qualitative responses and the key themes are presented within Section B along with selected quotations from interviewees, which provide a more in-depth insight into personal experience of the 'Troubles'.

Finally, to facilitate a more detailed analysis of available information, data from the NISHS was merged with data collected in the follow-up study. This enabled the research team to analyse responses from the 225 individuals in the follow-up study in relation to their profile of mental health disorders and health needs and also in relation to key demographic information collected in the original NISHS. Merging of these two sources of information was again facilitated in Stata using a unique sample identification variable included in both datasets.

APPENDIX 2

Recommendations from Trauma, Health & Conflict; in Northern Ireland.
A study of the epidemiology of trauma related disorders and qualitative
investigation of the impact of trauma on the individual (Ferry et al., 2008)

The Report recommended

1. Improved public information for people involved
   in traumatic experiences, their families, schools,
   employers etc. to improve detection of PTSD
   and promote and support early help seeking.
2. The development of service pathways to ensure
   people with trauma related needs are referred to
   trauma focused and related services.
3. Support for primary and community care
   services (statutory and non-statutory) in
   detecting trauma related disorders, treating
   where effective services exist at this level and
   referring appropriately to specialist trauma
   related services.
4. Continue and enhance the development of
   mental health services to identify, assess and
   effectively treat trauma related disorders and
   to support people with trauma related needs
   before, during and after therapy.
5. Continue and enhance the development of
   specialist evidence based trauma services
   including the provision of support for people
   with trauma related needs before, during and
   after therapy.
6. The development of early trauma intervention
   services in line with the developing evidence
   base.
7. Services treating adults with Major Depressive
   Disorder should routinely assess for PTSD and
   provide effective trauma focused treatments
   where found.
8. Services and employers should be mindful of
   the additional risk for women in developing
   PTSD.
9. Primary and secondary care services should
   take into consideration the possibility of a
   link between the presence of specific chronic
   physical health conditions and PTSD, and refer
   for assessment where indicated.
10. Services and employers should be aware of the
    link between PTSD and impaired daily living
    functioning.

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