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Enduring consequences of terrorism: 7-month follow-up survey of reactions to the bombings in London on 7 July 2005

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Background Terrorist attacks can have psychological effects on the general public.

Aims To assess the medium-term effects of the July 2005 London bombings on the general population in London and to identify risk factors for persistent effects.

Method We telephoned 1010 Londoners 11–13 days after the bombings to assess stress levels, perceived threat and travel intentions. Seven months later, 574 respondents were contacted again and asked similar questions, and questions concerning altered perceptions of self and the world.

Results 'Substantial stress' (11%), perceived threat to self (43%) and reductions in travel because of the bombings (19%) persisted at a reduced level; other perceived threats remained unchanged. A more negative world view was common. Other than degree of exposure to the bombings, there were no consistent predictors of which people with short-term reactions would develop persistent reactions.

Conclusions A longer-term impact of terrorism on the perceptions and behaviour of Londoners was documented.

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Terrorist attacks have psychological effects on the general community as well as on their direct victims. Increased stress levels, decreased feelings of safety, heightened perceptions of threat and behavioural changes have all been noted in communities following terrorist incidents (Schuster *et al*, 2001; Huddy *et al*, 2002; Bleich *et al*, 2003). Although not yet studied within the context of terrorism, traumatic events in general can also have implications for the way individuals perceive themselves and the world around them (Brewin, 2003). Several studies have shown that raised stress levels in the community typically decline in the months following an attack (Galea *et al*, 2003; Stein *et al*, 2004); whether other effects show similar changes is less clear. Why some people recover more quickly from these effects than others is also uncertain. In this study, we re-contacted respondents from a previous survey of short-term reactions to the July 2005 London bombings (Rubin *et al*, 2005) to assess medium-term changes in psychological and behavioural responses to terrorism and risk factors for the persistence of these effects.

METHOD

In our original survey conducted 11–13 days following the July 2005 London bombings we questioned 1010 Londoners aged 18 or over (10.1% response rate), with the respondents constituting a demographically representative sample of the general adult population of London. Full details of the survey have been reported elsewhere (Rubin *et al*, 2005). Of the 1010 participants, 815 gave permission for us to contact them at a later date. Attempts to re-contact these 815 people were made by telephone between 3 February and 5 March 2006 (7–8 months following the bombings), with participants who had moved house being traced using directory enquires and leads from the new occupants. Ethical approval for this study was granted by the Research Ethics Committee of the South London and Maudsley NHS Trust.

Outcome variables

As in our 2005 survey, participants were asked whether five stress symptoms had been experienced in the past 3 weeks as a result of the London bombings (Rubin *et al*, 2005). These symptoms were: feeling upset when reminded of what had happened; repeated disturbing memories, thoughts or dreams about what had happened; difficulty concentrating; trouble falling or staying asleep; and feeling irritable or angry (Schuster *et al*, 2001). The presence of 'substantial stress' was recorded when any of these symptoms had been experienced 'quite a bit' or 'extremely'.

Sense of threat was measured on a scale from 0 ('not at all') to 4 ('a lot') by asking whether the participant felt that their own life or the lives of close friends or relatives were in danger as a consequence of terrorism. Responses of 2, 3 or 4 were coded as high perceived threat. Participants were also asked how likely it was that London would experience another terrorist attack in the near future ('very' or 'somewhat likely' *v.* 'not very' or 'not at all likely'). Sense of safety while travelling was assessed separately for travel by tube, train, bus and car, and for travelling into central London and elsewhere in the UK on 4-point scales from 'very safe' to 'very unsafe'. Participants were categorised as having a low sense of safety if they responded 'very unsafe' to any item. Participants were also asked whether 'as a result of the bombings' they had spoken to or sought advice from a psychiatrist, psychologist, counsellor or other mental health specialist. All of these questions had also previously been asked in our 2005 survey (Rubin *et al*, 2005).

Changes in the way respondents viewed the world or themselves were assessed by asking whether they now saw the world differently or whether they felt different as a person since the bombings ('no difference', 'a little difference', 'a lot of difference'). Participants who responded 'a little difference' or 'a lot of difference' were asked whether these differences were positive, negative, or both. When participants had difficulty understanding these questions, interviewers prompted them by asking, 'for example, have you found that you now have different expectations of other people,

or Government?' or 'for example, have you found that you now have different priorities or values?', as appropriate.

To assess behavioural alterations we asked participants whether they had travelled more often, less often or no differently by tube, train, bus, car, going into central London, and going elsewhere in the UK in the past month compared with their travel patterns in the month before the bombings. We also asked whether alterations were mainly because of the bombings or for another reason. Participants were classified as having made travel alterations if they reported reductions in any travel behaviour as a result of the attacks. Participants were also asked whether, as a result of the bombings, they now spent more time, less time or the same amount of time shopping in central London, engaging in private leisure activities such as reading, gardening or walking alone and engaging in social leisure activities such as going to parties, entertaining at home or visiting people. Finally, a single open-ended question asked participants to report any other changes to their daily routine because of the bombings.

Definition of 'persistent' effects

For substantial stress, sense of threat to self and sense of safety while travelling, participants were categorised as having 'persistent' effects if they gave positive answers in both 2005 and 2006. Effects were categorised as short-term if they gave positive answers in 2005 only. For travel alterations, effects were categorised as persistent if participants reported that they intended to reduce any travel behaviours in 2005 and actually reduced them in 2006. Effects were categorised as short-term if participants intended to reduce any travel behaviour in 2005 but did not actually do so in 2006.

Predictor variables

The following variables which were assessed during our 2005 survey were tested as predictors of persistent effects and of altered perceptions of self and the world: all demographic variables, participants' belief prior to the bombings that they would know what best to do if caught in a terrorist attack; whether the participant had read the Government's *Preparing for Emergencies* booklet (HM Government, 2004); whether participants had ever previously experienced a terrorist attack or a false alarm about terrorism; whether participants were unsure about the safety of close friends or relatives immediately after the attacks; whether participants felt they might have been injured or killed in the attacks; whether they felt a relative or friend might have been injured or killed; whether they saw someone who was injured or killed; and whether a close friend or relative was injured or killed. In our 2006 survey, whether participants had ever consulted a mental health specialist for any reason prior to the bombings was also asked as a predictor variable.

Analyses

The prevalence of substantial stress was first calculated after applying weights based on the presence of substantial stress in 2005 and the probability of responding to the 2006 survey according to stress status in 2005. These weights were intended to adjust for the different follow-up rates observed for those with and without stress in 2005. However, as weighting resulted in an increase in the prevalence of substantial stress of only 1% and was unlikely to have fully compensated for our missing data (Kristman *et al*, 2005), all prevalence estimates and analyses are given unweighted.

Changes in prevalence over time were assessed using McNemar's χ^2-test. Odds ratios for the univariate associations between predictor variables and persistent stress, threat to self, low sense of safety and altered travel behaviours were calculated using separate logistic regressions for each predictor variable, comparing participants with persistent effects with those who had short-term effects. For perceptions of self and the world, we calculated univariate odds ratios for predictors of positive change or negative change *v.* no change, using multinomial logistic regressions. For the purposes of these analyses, participants who reported change that was both positive and negative were included in the 'no change' category.

RESULTS

Of the 815 people who gave consent for follow-up, we successfully interviewed 574 (70.4%). Of the remainder, 125 could not be traced, 40 were unavailable for interview during the month allocated for fieldwork and 76 declined to be interviewed. Compared with non-respondents, respondents were significantly older, of higher social class, were more likely to own their own home, more likely to be White, less likely to be Muslim and less likely to have household incomes under £30 000 (Table 1). They were also significantly less likely to have reported substantial stress in 2005, to have felt that their life was in danger from terrorism in 2005, or to have had a low sense of safety while travelling in 2005 (Table 1).

Outcome variables and changes over time

Table 2 shows changes over time for the outcome variables: 66 respondents (11%) reported experiencing substantial stress in the past 3 weeks, a significantly lower proportion than in our 2005 survey (27%) (χ^2=55.6, P<0.001). Similarly, significantly fewer people in 2006 (43%) than in 2005 (52%) believed that their own life was in danger from terrorism (χ^2=18.7, P<0.001). This change was not, however, reflected by a reduction in the perceived threat to loved ones or the perceived likelihood of another imminent attack on London (Table 2). People's sense of safety while travelling had significantly improved (χ^2=16.5, P<0.001), with 19% of respondents in 2005 feeling very unsafe while travelling compared with 12% in 2006. Similarly, although 30% of respondents originally said that they intended to travel less often when asked in 2005, significantly fewer (19%) reported actually travelling less often in 2006 as a result of the bombings. In addition to altered travel behaviours, 100 respondents (17%) reported shopping less often in central London, 17 (3%) reported reductions in private leisure activities, 31 (5%) reported reductions in social leisure activities and 22 (4%) reported other behavioural changes as a result of the bombings. In total, 162 participants (28%) reported some form of alteration to their behaviour which indicated either a reduction in certain activities or increased cautiousness. Five participants (1%) reported having sought advice or treatment from a mental health specialist as a result of the bombings.

There were 350 respondents (61%) who reported that the bombings had altered their view of the world; 151 (26%) reported feeling different as a person since the bombings (Table 3).

Predictors of persistent effects

There were 43 participants (7%) who were categorised as experiencing persistent

substantial stress and 110 (19%) short-term stress. Only two predictor variables significantly differentiated between these groups, with participants from poorer households OR=3.2, 95% CI 1.2–8.5) and those who initially feared that a family member or close friend might have been injured or killed (OR=2.6, 95% CI 1.0–6.9) being most at risk of persistent stress (see Table DS1, data supplement to the online version of this paper). The sample also included 198 people with a persistent sense of threat to self and 102 with a short-term sense of threat, as well as 42 people with a persistent sense of low safety and 66 with a short-term sense. None of the predictor variables was significantly associated with either of these outcomes (see Tables DS2 and 3, online data supplement).

Seventy-six participants were categorised as having made persistent travel alterations, compared with 97 who made short-term alterations. Only parental status significantly differentiated between these groups, with parents of children under 18 being most likely to report continued alterations (OR=1.9, 95% CI 1.0–3.4; see Table DS4, online data supplement).

No significant predictors were found for positive alterations to people's perceptions of the world (n=22; see Table DS5, online data supplement). Significant associations with negative changes to perceptions of the world (n=191) were being a home owner (OR=1.5, 95% CI 1.0–2.3), having previous experience of terrorism (less negative OR=0.6, 95% CI 0.4–0.9), having felt that you might be injured or killed (OR=2.3, 95% CI 1.0–5.1) and having felt that a close friend or relative might have been injured or killed (OR=1.5, 95% CI 1.0–2.1). Significant associations for positive changes to view of oneself (n=44) were working full-time (OR=2.1, 95% CI 1.1–4.1), being White (less positive, OR=0.4, 95% CI 0.2–0.7) and having had previous experience of terrorist incidents (OR=2.5, 95% CI 1.3–4.7). Significant predictors of negative changes in view of oneself (n=33) were being Muslim compared with any other faith (OR=3.7, 95% CI 1.3–9.8), having children under 18 (OR=2.1, 95% CI 1.0–4.3), having felt that you might be injured or killed (OR=5.3, 95% CI 2.0–14.3), having a friend or relative who was injured or killed (OR=4.0, 95% CI 1.1–15.1) and having consulted a mental health specialist prior to the bombings (OR=2.2, 95% CI 1.0–4.7).

Table 1 Demographic characteristics and main outcome variables in 2005 for respondents and non-respondents to 2006 survey[1]

Variable (as measured in 2005 survey)	Respondents	Non-respondents	Statistics	
			χ^2	P
Gender, n/N (%)				
Female	316/574 (55)	250/436 (57)	0.5	0.5
Male	258/574 (45)	186/436 (43)		
Age, years: mean (s.d.)	44.5 (16.1) (n=571)	40.0 (17.0) (n=409)		<0.001[2]
Social class, n/N (%)				
A/B	188/557 (34)	109/415 (26)	15.3	<0.001
C1/C2	284/557 (51)	204/415 (49)		
D/E	85/557 (15)	102/415 (25)		
Working status, n/N (%)				
Full-time	279/573 (49)	197/432 (46)	0.9	0.3
Not full-time	294/573 (51)	235/432 (54)		
Residential location, n/N (%)				
Inner London	210/574 (37)	171/436 (39)	0.7	0.4
Outer London	364/574 (63)	265/436 (61)		
Housing tenure, n/N (%)				
House owner	395/571 (69)	223/433 (52)	32.5	<0.001
Renting or other	176/571 (31)	210/433 (49)		
Ethnicity, n/N (%)				
White	453/574 (79)	269/432 (62)	33.7	<0.001
Other	121/574 (21)	163/432 (38)		
Religion, n/N (%)				
Muslim	35/572 (6)	53/436 (12)	11.5	0.003
None	132/572 (23)	90/436 (21)		
Other faith	405/572 (71)	293/436 (67)		
Income, n/N (%)				
<£30 000	250/512 (49)	224/366 (61)	13.2	<0.001
>£30 000	262/512 (51)	142/366 (39)		
Parental status, n/N (%)				
Children under 18	173/574 (30)	145/436 (33)	1.1	0.3
No children under 18	401/574 (70)	291/436 (67)		
'Substantial stress', n/N (%)				
No	421/574 (73)	281/436 (64)	9.3	0.002
Yes	153/574 (27)	155/436 (36)		
Felt life is in danger from terrorism, n/N (%)				
Yes	300/572 (52)	260/430 (61)	6.4	0.01
No	272/572 (48)	170/430 (40)		
Felt very unsafe when travelling, n/N (%)				
Yes	108/574 (19)	125/436 (29)	13.6	<0.001
No	466/574 (81)	311/436 (71)		
Altered travel intentions, n/N (%)				
Yes	171/574 (30)	147/436 (34)	1.8	0.2
No	403/574 (70)	289/436 (66)		

1. Results are unweighted and therefore slightly different to those previously reported for our 2005 survey (Rubin *et al*, 2005).
2. t=4.2, d.f.=978.

New cases

A minority of respondents to this survey could also be categorised as 'new cases' for substantial stress (n=23, 4%), threat to self (n=48, 8%), low sense of safety (n=26, 5%) and altered travel behaviour (n=32, 6%). These people described effects

Table 2 Prevalence of substantial stress, perceived threat, sense of safety and altered travel behaviour 7–8 months following the London bombings and 11–13 days after the bombings

Variable	Positive responses, *n*		Statistics	
	2006	2005	χ^2	*P*
Presence of substantial stress[1]	66/574 (11)	153/574 (27)	55.6	<0.001
Do you feel your life is in danger from terrorism?	247/574 (43)	300/572 (52)	18.7	<0.001
Do you feel the lives of your close family members or those dear to you are in danger from terrorism?	299/574 (52)	316/574 (55)	1.7	0.2
Do you think another attack on London is likely in the near future?	516/574 (90)	511/569 (90)	0.3	0.6
Do you feel very unsafe when travelling by tube, train, bus, car, going into central London or going elsewhere in the UK?	68/574 (12)	108/574 (19)	16.5	<0.001
Are you travelling less often by tube, train, bus, car, going into central London or going elsewhere in the UK, mainly because of the London bombings?	108/574 (19)	171/574 (30)[2]	31.8	<0.001

1. Substantial stress defined as a response of 'quite a bit' or 'extremely' to any of the following: feeling upset when reminded of what happened; repeated disturbing memories, thoughts or dreams about what happened; difficulty concentrating; trouble falling or staying asleep; and feeling irritable or angry (Schuster *et al*, 2001).
2. Response of 'less often' 11–13 days after the bombings to one or more of six questions regarding the six forms of travel. These questions began 'Once the London transport system is back to normal, do you think you will travel more often, less often or will the London bombings make no difference to how often you travel in the following ways' (Rubin *et al*, 2005).

Table 3 Changes in the way people see the world and themselves 7–8 months following the London bombings

Question	Response, *n*/*N* (%)		
	No difference	A little difference	A lot of difference
Have you found that you see the world differently since the bombings, or have the bombings made no difference to how you see the world?	224/574 (39)	213/574 (37)[1]	137/574 (24)[1]
Have you found that you feel different as a person since the bombings, or have the bombings made no difference to how you feel as a person?	423/547 (77)	115/547 (21)[2]	36/547 (7)[2]

1. Of the 350 participants who reported a lot or a little difference, 22 considered the change positive, 191 considered it negative and 137 considered it both.
2. Of the 151 participants who reported a lot or a little difference, 44 considered the change positive, 33 considered it negative and 74 considered it both.

that were present in 2006 but not 2005. We did not analyse predictors of these new effects.

DISCUSSION

In our initial survey, 11–13 days after the London bombings 31% of Londoners reported one or more symptoms of 'substantial stress' relating to the attacks (Rubin *et al*, 2005). The follow-up survey shows that after 7–8 months this figure had fallen to 11%. Although levels of substantial stress were considerably reduced, 11% is not a trivial figure. Equally, although perceived threat to self was also reduced, the prevalences for the various threat variables remained relatively high, with 52% of people believing that the lives of loved ones were in danger, 43% believing their own life was in danger and 90% believing that another attack on London was very or somewhat likely. Meanwhile, although perceived safety on transport had improved, substantial numbers of people continued to alter their travel behaviours in response to the bombings. In summary, although many of the psychological and behavioural repercussions of the attacks on 7 July 2005 had diminished by the time of our 7-month follow-up survey, effects attributed by our respondents to these attacks remained clearly observable.

Reductions in stress symptoms over time were expected, with several studies showing that stress in local communities reduces in the months following an attack (Galea *et al*, 2003; Stein *et al*, 2004). There are relatively few comparable studies for our other main outcomes. Changes in perceived threat have previously been studied in one sample of American adults who were questioned about the probability of their being hurt as a result of terrorism in the coming year (Fischhoff *et al*, 2005). The mean probability given by this sample remained almost constant from November 2001 (2 months after the attacks of 11 September) to November 2002. Changes in behaviour as a result of terrorism have been studied in more detail, although typically only within the first 2 or 3 months following an incident (Huddy *et al*, 2002; Grieger *et al*, 2003; Stein *et al*, 2004; Lopez-Rousseau, 2005; Gigerenzer, 2006). However, at least one survey has suggested that behavioural changes can last for some time, with one-fifth of American adults reporting in December 2003 that they avoided travel because of the threat of terrorism, despite the last major incident in the USA having been the sniper attacks in Washington, DC over a year previously (Widmeyer Communications, 2004). Although stress symptoms normally reduce with time following a terrorist attack, these results and those from our own survey suggest that other psychosocial responses may be more persistent.

Predictors of change

Why do some people experience more persistent effects than others following a traumatic event? Several previous studies have attempted to answer this question, although often with limited success (Breslau & Davis, 1992; North *et al*, 1992; Schnurr *et al*, 2004). Some evidence suggests that

variables related to the type and severity of the trauma are important for predicting the chronicity of post-traumatic stress disorder (PTSD) (e.g. the degree of threat to one's life; Schnurr *et al*, 2004). In our study, feeling that friends or relatives might have been injured or killed was significantly associated with persistent stress. In addition, this variable together with feeling that you yourself might have been injured or killed and having a friend or relative who actually was injured or killed were associated with negative changes to view of the world and view of oneself. This suggests that how a person views the various threats present at the time of an incident can predict the chronicity of psychological responses.

Other variables identified as predictors of chronicity of PTSD, such as pre-existing emotional disorder (Dunmore *et al*, 2001) and demographics (Breslau & Davis, 1992; Schnurr *et al*, 2004), also showed some limited associations with outcomes in this study. These variables included having consulted a mental health specialist for any reason prior to the bombings (associated with negative change in perception of self), having children under 18 (negative changes in self-perception and persistent reduction in travel), having a low income (persistent substantial stress) and owning a home (negative changes in world view). Interestingly, although being Muslim was the most important risk factor for the development of substantial stress in our original survey (Rubin *et al*, 2005), religion did not predict the persistence of substantial stress in our follow-up survey. However, being Muslim was a significant risk factor for experiencing negative changes in view of oneself, possibly because of the perceived negative portrayal of Muslims in the media and wider society following the attacks on 7 July.

In our initial survey, being unable to contact others by mobile phone on 7 July and being uncertain about the safety of loved ones were both significant predictors of the development of substantial stress (Rubin *et al*, 2005). The need for people to maintain contact with others during stressful incidents in order to prevent panic and reduce distress has been noted before (Mawson, 2005). However, our current results suggest that the relevance of these effects might be limited to the initial development of distress. Once effects had developed, whether or not respondents were certain about the safety of loved ones on the day of the incident had little bearing on their subsequent chances of medium-term recovery. However, several of the significant predictors of ongoing effects were family related, involving parental status or fear that a family member of close friend might have been injured or killed. Similarly, although levels of perceived threat to self were reduced during the period between our two surveys, perceived threat to 'close family members or those dear to you' was more persistent. Therefore, it is possible that among members of the wider community the medium-term psychological impact of a terrorist incident is largely mediated by the perceived risk to one's family rather than to oneself.

Prior to 7 July, attempts had been made to prepare the UK population for a possible major incident. As part of this effort, leaflets containing advice on what to do during an emergency were sent to every household (HM Government, 2004). Although reading this leaflet was associated with a reduced likelihood of intending to alter travel behaviours immediately following 7 July (Rubin *et al*, 2005), it had no effect on subsequent duration of psychological or behavioural changes. Similarly, although having had experience of previous terrorist incidents or false alarms had a protective effect against the development of substantial stress following the attacks (Rubin *et al*, 2005), it did not predict lack of persistence of substantial stress in this survey. One reason for this might be that our predictor variable did not capture some important element underlying the relationship between prior experience and reactions to a subsequent event. For example, how an individual coped with a prior traumatic incident might be the crucial element in determining distress following a subsequent event. Previous experience did, however, predict reduced likelihood of perceiving the world more negatively, possibly because any pre-conceptions of the world as being fair or benign had already been tarnished for respondents with previous experience of terrorism.

The outcomes discussed so far have all been negative, yet there is growing recognition that traumatic events can also have positive effects for some people (Tedeschi & Calhoun, 1996). For example, nearly 80% of participants who reported changes in self-perception in this study reported that these changes were at least partially positive; moreover, 45% of those who said they now saw the world differently saw it at least somewhat more positively than before. Interestingly, significant predictors of negative changes did not also predict positive changes, suggesting that the positive and negative aspects of self- and world perception are qualitatively different and do not simply represent opposite ends of the same spectrum. Although no significant predictors of positive changes to world view were identified, predictors of positive changes to self-perception included working full-time, being from a Black or minority ethnic group and having had previous experience of terrorism.

Limitations

A degree of caution is required when interpreting our results because although our 2005 survey was based on a demographically representative sample of adult Londoners, some bias will have occurred in the 2006 survey as a result of differential attrition. Respondents to the 2006 survey were significantly less likely than non-respondents to have experienced substantial stress in 2005, to have felt their life was in danger and to have felt unsafe while travelling. These biases suggest that our 2006 prevalence figures for these outcomes are likely to be underestimates.

It is reasonable to question whether our measure of substantial stress might have produced an artificially inflated prevalence estimate. The scale was primarily chosen to enable comparison with previous studies (Schuster *et al*, 2001; Vazquez *et al*, 2006), but is not without critics who have pointed out that responses to one of its five items account for most of the cases of stress identified (Vazquez Valverde, 2005). Should responses of 'quite a bit' or 'extremely' to an item which reads 'have you been bothered by feeling upset when something reminds you of what happened' be taken as indicating 'substantial stress', or could they equally be expressions of sorrow or displeasure at the attacks? Excluding responses to this single item would have reduced our prevalence estimate for substantial stress from 11 to 5%.

Previous studies have demonstrated that the way a survey is presented can influence the results, with participants tending to respond to questions in a way that is consistent with the perceived purpose of the research (LaGuardia *et al*, 1983). Whether such priming effects influenced the responses of our participants is unknown, but in the context of a 15 min interview asking respondents to recall in detail the

emotive events of 7 July, this possibility cannot be excluded. Participants might have overemphasised the extent to which they were affected by the attacks.

The large number of tests of significance we performed, together with the small number of participants included in some, also presents problems for the interpretation of our results. Not only is it possible that some of the significant associations we found were type 1 errors, the large confidence intervals for some of the non-significant results suggest that these data were sometimes consistent with relatively large effects which we simply did not have the power to detect. Larger studies would be necessary to confirm these findings.

Caution might also be warranted with regard to our analyses of positive and negative changes in self- and world perception. In particular, how participants who reported both positive and negative changes should be handled in these analyses remains an open question. Placing these participants in the reference category as we have done might be seen as assuming that positive and negative changes somehow cancel each other out. On the other hand, including them in the same categories as those who reported entirely positive and entirely negative changes would have introduced substantial overlap between these groups, blurring any differences in terms of predictor variables. In practice, re-analysing our data according to the second method of categorisation altered few of the results for change in world view, although it did have more of an impact on the results for feeling different as a person (data available from the authors on request). Further research to characterise the exact nature of the changes reported by members of the community following acts of terrorism might help to clarify this issue.

Finally, it should also be noted that, apart from the change in views about world and self-perception variables, this study only attempted to identify predictors of persistent effects, comparing respondents reporting effects in 2005 and 2006 with those reporting effects in 2005 only. Another group of interesting participants who we did not study in detail were those who did not report problems in 2005 but who had developed problems by 2006. Whether these 'new cases' were experiencing delayed-onset effects as a direct result of the bombings is unclear. Even prior to 7 July, some Londoners were reporting heightened perceptions of threat from terrorism and were making behavioural alterations as a consequence (Goodwin *et al*, 2005; Schmocker *et al*, 2006). Since 7 July, continuing debate about the risk from terrorism in the UK combined with news from Iraq and Afghanistan and several false alarms and failed attacks have contributed to the elevated sense of disquiet felt by Londoners. The behavioural changes, perceptions of threat, reduced sense of safety and stress symptoms described by our new cases might actually be the result of these broader concerns, but were attributed to the events of 7 July given their particular salience.

Clinical implications

Our data suggest that 7–8 months later a residual level of disquiet remained among Londoners in relation to the July bombings. However, we emphasise that this disquiet does not necessarily represent a clinical problem requiring treatment. Indeed no measures of trauma-related psychopathology were included in this study, partly to avoid overburdening our participants. Instead, 'substantial stress,' perceived lack of safety, changes to behaviour and altered perceptions could all be seen as normal responses to what is perceived by many to be an ongoing threat.

Our results are not particularly encouraging to those hoping to provide targeted early interventions to members of the wider community with short-term stress reactions and at risk of developing persistent problems. Although we were able to find several significant associations for some outcomes, it was striking how few consistent predictor variables could be identified in this general population sample. This underscores that those most in need of intervention are likely to be among those with the greatest direct personal exposure to injury and death.

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REFERENCES

Bleich, A., Gelkopf, M. & Solomon, Z. (2003) Exposure to terrorism, stress-related mental health symptoms, and coping behaviors among a nationally representative sample in Israel. *JAMA*, **290**, 612–620.

Breslau, N. & Davis, G. C. (1992) Posttraumatic stress disorder in an urban population of young adults: risk factors for chronicity. *American Journal of Psychiatry*, **149**, 671–675.

Brewin, C. R. (2003) *Post-Traumatic Stress Disorder*. Yale University Press.

Dunmore, E., Clark, D. M. & Ehlers, A. (2001) A prospective examination of the role of cognitive factors in persistent posttraumatic stress disorder (PTSD) after physical or sexual assault. *Behaviour Research and Therapy*, **39**, 1063–1084.

Fischhoff, B., Gonzalez, R. M., Lerner, J. S., *et al* (2005) Evolving judgements of terror risks: foresight, hindsight, and emotion. *Journal of Experimental Psychology: Applied*, **11**, 124–139.

Galea, S., Vlahov, D., Resnick, H., *et al* (2003) Trends of probable post-traumatic stress disorder in New York City after September 11 terrorist attacks. *American Journal of Epidemiology*, **158**, 514–524.

Gigerenzer, G. (2006) Out of the frying pan into the fire: behavioral reactions to terrorist attacks. *Risk Analysis*, **26**, 347–351.

Goodwin, R., Wilson, M. & Gaines Jr, S. (2005) Terror threat perception and its consequences in contemporary Britain. *British Journal of Psychology*, **96**, 389–406.

Grieger, T. A., Fullerton, C. S., Ursano, R. J., *et al* (2003) Acute stress disorder, alcohol use, and perception of safety among hospital staff after the sniper attacks. *Psychiatric Services*, **54**, 1383–1387.

HM Government (2004) *Preparing for Emergencies. What You Need to Know*. http://www.preparingforemergencies.gov.uk

Huddy, L., Feldman, S., Capelos, T., *et al* (2002) The consequences of terrorism: disentangling the effects of personal and national threat. *Political Psychology*, **23**, 485–509.

Kristman, V. L., Manno, M. & Cote, P. (2005) Methods to account for attrition in longitudinal data: do they work? A simulation study. *European Journal of Epidemiology*, **20**, 657–662.

LaGuardia, R. L., Smith, G., Francois, R., *et al* (1983) Incidence of delayed stress disorder among Vietnam era veterans: the effect of priming on response set. *American Journal of Orthopsychiatry*, **53**, 18–26.

Lopez-Rousseau, A. (2005) Avoiding the death risk of avoiding a dread risk: the aftermath of March 11 in Spain. *Psychological Science*, **16**, 426–428.

Mawson, A. R. (2005) Understanding mass panic and other collective responses to threat and disaster. *Psychiatry*, **68**, 95–113.

North, C. S., Smith, E. M. & Spitznagel, E. L. (1992) One year follow-up of survivors of a mass shooting. *American Journal of Psychiatry*, **154**, 1696–1702.

Rubin, G. J., Brewin, C. R., Greenberg, N., *et al* (2005) Psychological and behavioural reactions to the bombings in London on 7 July 2005: cross sectional survey of a representative sample of Londoners. *BMJ*, **331**, 606–611.

Schmocker, J. D., Fonzone, A., Quddus, M., *et al* (2006) Changes in the frequency of shopping trips in response to a congestion charge. *Transport Policy*, **13**, 217–228.

Schnurr, P. P., Lunney, C. A. & Sengupta, A. (2004) Risk factors for the development versus maintenance of posttraumatic stress disorder. *Journal of Traumatic Stress*, **17**, 85–95.

Schuster, M. A., Stein, B. D., Jaycox, L. H., *et al* (2001) A national survey of stress reactions after the September 11, 2001, terrorist attacks. *New England Journal of Medicine*, **345**, 1507–1512.

Stein, B. D., Elliott, M. N., Jajcox, L. H., *et al* (2004) A national longitudinal study of the psychological consequences of the September 11, 2001 terrorist attacks: reactions, impairment, and help-seeking. *Psychiatry*, **67**, 105–117.

Tedeschi, R. G. & Calhoun, L. G. (1996) The posttraumatic growth inventory: measuring the positive legacy of trauma. *Journal of Traumatic Stress*, **9**, 455–471.

Vazquez Valverde, C. (2005) Stress reactions of the general population after the terrorist attacks of S11, 2001 (USA) and M11, 2004 (Madrid, Spain): myths and realities. *Annuary of Clinical and Health Psychology*, **1**, 9–25.

Vazquez, C., Perez-Sales, P. & Matt, G. (2006) Post-traumatic stress reactions following the March 11, 2004 terrorist attacks in a Madrid community sample: a cautionary note about the measurement of psychological trauma. *Spanish Journal of Psychology*, **9**, 61–74.

Widmeyer Communications (2004) *Threat of Terrorism and Mental Health: A Public Opinion Poll*. Available at http://www.nasmhpd.org/general_files/terrorism_poll.pdf

Table DS1 Predictors of persistent substantial stress 7–8 months after the London bombings in those who reported substantial stress 11–13 days after the bombings

Variable	*n*	Substantial stress at 7–8 months, *n* (%)	Odds ratio (95% CI)
Gender			
Female	100	29 (29)	1.1 (0.5–2.4)
Male	53	14 (26)	Reference
Age, years			
18–24	19	4 (21)	0.4 (0.1–1.7)
25–44	63	14 (22)	0.4 (0.1–1.3)
45–64	50	16 (32)	0.7 (0.2–2.1)
65+	20	8 (40)	Reference
Social class			
A/B	38	9 (24)	0.4 (0.2–1.2)
C1/C2	77	18 (23)	0.4 (0.2–1.0)
D/E	31	13 (42)	Reference
Working status			
Full-time	61	15 (25)	0.7 (0.4–1.6)
Not full-time	92	28 (30)	Reference
Residential location			
Inner London	52	15 (29)	1.1 (0.5–2.2)
Outer London	101	28 (28)	Reference
Housing tenure			
House owner	95	24 (25)	0.6 (0.3–1.3)
Renting/other	55	19 (35)	Reference
Ethnicity			
White	97	29 (30)	1.3 (0.6–2.7)
Other	56	14 (25)	Reference
Religion			
Muslim	25	7 (28)	0.9 (0.3–2.4)
None	22	4 (18)	0.5 (0.2–1.6)
Other faith	106	32 (30)	Reference
Household income			
Under £30 000	79	27 (34)	3.2 (1.2–8.5)*
Over £30 000	43	6 (14)	Reference
Parental status			
Children under 18	40	9 (23)	0.7 (0.3–1.6)
No children under 18	113	34 (30)	Reference
Before the bombings, did you know what to do in the event of a terrorist attack?			
Yes	34	9 (27)	1.2 (0.5–3.1)
No	65	15 (23)	Reference
Read government leaflet			
Yes	60	22 (37)	1.98 (1.0–4.1)
No	93	21 (23)	Reference
Prior experience of terrorism			
Yes	46	14 (30)	1.2 (0.6–2.5)
No	107	29 (27)	Reference
Certainty about others			
Very or fairly sure	52	11 (21)	0.6 (0.3–1.3)
Very or fairly unsure	92	29 (32)	Reference
I felt I might be injured or killed			
Yes	12	4 (33)	1.3 (0.4–4.6)
No	141	39 (28)	Reference

(continued)

Table DSI *(continued)*

Variable	*n*	Substantial stress at 7–8 months, *n* (%)	Odds ratio (95% CI)
I felt that a family member or close friend might be injured or killed			
Yes	114	37 (33)	2.6 (1.0–6.9)*
No	39	6 (15)	Reference
I saw someone who was injured or killed			
Yes	5	1 (20)	0.6 (0.1–5.8)
No	148	42 (28)	Reference
A family member or close friend was injured or killed			
Yes	7	1 (14)	0.4 (0.05–3.5)
No	146	42 (29)	Reference
Consultation with a mental health specialist prior to the bombings			
Yes	34	8 (24)	0.7 (0.3–1.8)
No	119	35 (29)	Reference

*$P < 0.05$.

Table DS2 Predictors of persistent threat to self 7–8 months after the London bombings in those who reported heightened threat to self 11–13 days after the bombings

Variable	*n*	High threat to self at 7–8 months, *n* (%)	Odds ratio (95% CI)
Gender			
Female	185	125 (68)	1.2 (0.7–2.0)
Male	115	73 (64)	Reference
Age, years			
18–24	32	23 (72)	1.4 (0.5–4.0)
25–44	146	90 (62)	0.9 (0.4–1.9)
45–64	84	60 (71)	1.4 (0.6–3.2)
65+	36	23 (64)	Reference
Social class			
A/B	87	57 (66)	0.8 (0.4–1.7)
C1/C2	152	97 (64)	0.8 (0.4–1.5)
D/E	53	37 (70)	Reference
Working status			
Full-time	143	95 (66)	1.0 (0.6–1.6)
Not full-time	156	103 (66)	Reference
Residential location			
Inner London	98	69 (70)	1.3 (0.8–2.3)
Outer London	202	129 (64)	Reference
Housing tenure			
House owner	198	130 (66)	1.0 (0.6–1.6)
Renting/other	99	66 (67)	Reference
Ethnicity			
White	218	139 (64)	0.7 (0.4–1.2)
Other	82	59 (72)	Reference
Religion			
Muslim	23	16 (70)	1.1 (0.4–2.9)
None	53	32 (60)	0.8 (0.4–1.4)
Other faith	224	150 (67)	Reference
Household income			
Under £30 000	144	94 (65)	1.0 (0.6–1.7)
Over £30 000	124	81 (65)	Reference
Parental status			
Children under 18	94	57 (61)	0.7 (0.4–1.2)
No children under 18	206	141 (68)	Reference
Before the bombings, did you know what to do in the event of a terrorist attack?			
Yes	79	47 (60)	0.7 (0.4–1.2)
No	142	97 (68)	Reference
Read government leaflet			
Yes	116	78 (67)	1.1 (0.7–1.8)
No	184	120 (65)	Reference
Prior experience of terrorism			
Yes	94	58 (62)	0.8 (0.5–1.3)
No	206	140 (68)	Reference
Certainty about others			
Very or fairly sure	104	70 (67)	1.2 (0.7–2.0)
Very or fairly unsure	174	111 (64)	Reference
I felt I might be injured or killed			
Yes	21	12 (57)	0.7 (0.3–1.6)
No	279	186 (67)	Reference

(continued)

Table DS2 *(continued)*

Variable	*n*	High threat to self at 7–8 months, *n* (%)	Odds ratio (95% CI)
I felt that a family member or close friend might be injured or killed			
Yes	206	138 (67)	1.2 (0.7–1.9)
No	94	60 (64)	Reference
I saw someone who was injured or killed			
Yes	9	6 (67)	1.0 (0.2–4.2)
No	291	192 (66)	Reference
A family member or close friend was injured or killed			
Yes	9	4 (44)	0.4 (0.1–1.5)
No	291	194 (67)	Reference
Consultation with a mental health specialist prior to the bombings			
Yes	60	43 (72)	1.4 (0.7–2.6)
No	240	155 (65)	Reference

Table DS3 Predictors of persistent low sense of safety while travelling 7–8 months after the London bombings in those who reported a low sense of safety while travelling 11–13 days after the bombings

Variable	*n*	Low sense of safety at 7–8 months, *n* (%)	Odds ratio (95% CI)
Gender			
Female	74	27 (37)	0.7 (0.3–1.7)
Male	34	15 (44)	Reference
Age, years			
18–24	11	3 (27)	0.3 (0.0–1.9)
25–44	57	20 (35)	0.4 (0.1–1.8)
45–64	30	13 (43)	0.6 (0.1–2.7)
65+	9	5 (56)	Reference
Social class			
A/B	29	11 (38)	1.2 (0.4–3.8)
C1/C2	54	23 (43)	1.5 (0.5–4.0)
D/E	24	8 (33)	Reference
Working status			
Full-time	40	17 (43)	1.3 (0.6–2.8)
Not full-time	68	25 (37)	Reference
Residential location			
Inner London	42	16 (38)	0.9 (0.4–2.1)
Outer London	66	26 (39)	Reference
Housing tenure			
House owner	58	23 (40)	1.1 (0.5–2.4)
Renting/other	48	18 (38)	Reference
Ethnicity			
White	70	27 (39)	1.0 (0.4–2.2)
Other	38	15 (40)	Reference
Religion			
Muslim	12	5 (42)	1.1 (0.3–3.9)
None	13	5 (39)	1.0 (0.3–3.3)
Other faith	83	32 (39)	Reference
Household income			
Under £30 000	60	24 (40)	1.2 (0.5–2.9)
Over £30 000	34	12 (35)	Reference
Parental status			
Children under 18	46	15 (33)	0.6 (0.3–1.4)
No children under 18	62	27 (44)	Reference
Before the bombings, did you know what to do in the event of a terrorist attack?			
Yes	27	9 (33)	0.7 (0.3–2.0)
No	44	18 (41)	Reference
Read government leaflet			
Yes	40	15 (38)	0.9 (0.4–2.0)
No	68	27 (40)	Reference
Prior experience of terrorism			
Yes	35	13 (37)	0.9 (0.4–2.1)
No	73	29 (40)	Reference
Certainty about others			
Very or fairly sure	24	7 (29)	0.6 (0.2–1.7)
Very or fairly unsure	77	30 (39)	Reference

(continued)

Table DS3 *(continued)*

Variable	*n*	Low sense of safety at 7–8 months, *n* (%)	Odds ratio (95% CI)
I felt I might be injured or killed			
Yes	10	4 (40)	1.1 (0.3–4.0)
No	98	38 (39)	Reference
I felt that a family member or close friend might be injured or killed			
Yes	82	34 (42)	1.6 (0.6–4.1)
No	26	8 (31)	Reference
I saw someone who was injured or killed			
Yes	8	1 (13)	0.2 (0.0–1.7)
No	100	41 (41)	Reference
A family member or close friend was injured or killed			
Yes	5	1 (20)	0.4 (0.0–3.5)
No	103	41 (40)	Reference
Consultation with a mental health specialist prior to the bombings			
Yes	18	10 (56)	2.3 (0.8–6.3)
No	90	32 (36)	Reference

Table DS4 Predictors of persistent reductions to travel behaviours 7–8 months after the London bombings in those who reported intending to travel less 11–13 days after the bombings

Variable	*n*	Reduced travel behaviour at 7–8 months, *n* (%)	Odds ratio (95% CI)
Gender			
Female	116	52 (45)	1.1 (0.6–2.1)
Male	57	24 (42)	Reference
Age, years			
18–24	19	5 (26)	0.4 (0.1–1.9)
25–44	100	43 (43)	0.9 (0.3–2.8)
45–64	39	21 (54)	1.4 (0.4–4.8)
65+	13	6 (46)	Reference
Social class			
A/B	53	28 (53)	1.9 (0.8–4.8)
C1/C2	87	35 (40)	1.2 (0.5–2.7)
D/E	30	11 (37)	Reference
Working status			
Full-time	79	31 (39)	0.7 (0.4–1.3)
Not full-time	93	45 (48)	Reference
Residential location			
Inner London	68	28 (41)	0.8 (0.4–1.5)
Outer London	105	48 (46)	Reference
Housing tenure			
House owner	104	48 (46)	1.2 (0.7–2.4)
Renting/other	67	27 (40)	Reference
Ethnicity			
White	125	60 (48)	1.8 (0.9–3.7)
Other	48	16 (33)	Reference
Religion			
Muslim	15	6 (40)	0.8 (0.3–2.4)
None	28	11 (39)	0.8 (0.3–1.8)
Other faith	130	59 (45)	Reference
Household income			
Under £30 000	83	35 (42)	1.0 (0.5–1.8)
Over £30 000	74	32 (43)	Reference
Parental status			
Children under 18	72	38 (53)	1.9 (1.0–3.4)*
No children under 18	101	38 (38)	Reference
Before the bombings, did you know what to do in the event of a terrorist attack?			
Yes	38	36 (42)	1.0 (0.5–2.2)
No	86	16 (42)	Reference
Read government leaflet			
Yes	54	25 (46)	1.1 (0.6–2.2)
No	119	51 (43)	Reference
Prior experience of terrorism			
Yes	55	28 (51)	1.5 (0.8–2.9)
No	118	48 (41)	Reference
Certainty about others			
Very or fairly sure	53	24 (45)	1.1 (0.5–2.0)
Very or fairly unsure	109	48 (44)	Reference

(continued)

Table DS4 *(continued)*

Variable	*n*	Reduced travel behaviour at 7–8 months, *n* (%)	Odds ratio (95% CI)
I felt I might be injured or killed			
Yes	15	5 (33)	0.6 (0.2–1.9)
No	158	71 (45)	Reference
I felt that a family member or close friend might be injured or killed			
Yes	128	61 (48)	1.8 (0.9–3.7)
No	45	15 (33)	Reference
I saw someone who was injured or killed			
Yes	6	2 (33)	0.6 (0.1–3.5)
No	167	74 (44)	Reference
A family member or close friend was injured or killed			
Yes	6	2 (33)	0.6 (0.1–3.5)
No	167	74 (44)	Reference
Consultation with a mental health specialist prior to the bombings			
Yes	37	18 (49)	1.3 (0.6–2.6)
No	136	58 (43)	Reference

*$P < 0.05$.

Table DS5 Predictors of positive or negative changes to world view 7–8 months after the London bombings

Variable	*n*	Positive change		Negative change (%)	
		n (%)	Odds ratio (95% CI)	*n* (%)	Odds ratio (95% CI)
Gender					
Female	316	10 (3)	0.7 (0.3–1.6)	108 (34)	1.1 (0.8–1.5)
Male	258	12 (5)	Reference	83 (32)	Reference
Age, years					
18–24	48	0 (0)	–	15 (31)	0.8 (0.4–1.7)
25–44	272	10 (4)	0.7 (0.2–2.2)	87 (32)	0.8 (0.5–1.5)
45–64	175	8 (5)	0.9 (0.2–3.0)	61 (35)	1.0 (0.6–1.7)
65+	77	4 (5)	Reference	27 (35)	Reference
Social class					
A/B	188	6 (3)	0.5 (0.1–1.5)	64 (34)	1.2 (0.7–2.1)
C1/C2	284	10 (4)	0.5 (0.2–1.4)	94 (33)	1.1 (0.7–1.9)
D/E	85	6 (7)	Reference	25 (29)	Reference
Working status					
Full-time	279	11 (4)	1.0 (0.4–2.4)	88 (32)	0.9 (0.6–1.2)
Not full-time	294	11 (4)	Reference	102 (35)	Reference
Residential location					
Inner London	210	4 (2)	0.3 (0.1–1.0)	65 (31)	0.8 (0.6–1.2)
Outer London	364	18 (4)	Reference	126 (35)	Reference
Housing tenure					
House owner	395	15 (4)	1.1 (0.4–2.8)	142 (36)	1.5 (1.0–2.3)*
Renting/other	176	7 (4)	Reference	47 (27)	Reference
Ethnicity					
White	453	16 (4)	0.7 (0.3–2.0)	155 (34)	1.2 (0.8–1.9)
Other	121	6 (5)	Reference	36 (30)	Reference
Religion					
Muslim	35	3 (9)	2.6 (0.7–9.7)	12 (34)	1.2 (0.6–2.5)
None	132	4 (3)	0.9 (0.3–2.8)	48 (36)	1.2 (0.6–1.8)
Other faith	405	15 (4)	Reference	131 (32)	Reference
Household income					
Under £30 000	250	8 (3)	0.7 (0.3–1.8)	76 (30)	0.8 (0.6–1.2)
Over £30 000	262	11 (4)	Reference	88 (34)	Reference
Parental status					
Children under 18	173	8 (5)	1.4 (0.6–3.4)	59 (34)	1.1 (0.7–1.6)
No children under 18	401	14 (4)	Reference	132 (33)	Reference
Before the bombings, did you know what to do in the event of a terrorist attack?					
Yes	179	7 (4)	1.0 (0.4–2.7)	54 (30)	0.8 (0.5–1.2)
No	268	10 (4)	Reference	92 (34)	Reference
Read government leaflet					
Yes	239	9 (4)	1.0 (0.4–2.4)	82 (34)	1.1 (0.8–1.5)
No	335	13 (4)	Reference	109 (33)	Reference
Prior experience of terrorism					
Yes	198	4 (2)	0.4 (0.1–1.1)	55 (28)	0.6 (0.4–0.9)*
No	376	18 (5)	Reference	136 (36)	Reference
Certainty about others					
Very or fairly sure	239	10 (4)	1.0 (0.4–2.3)	78 (33)	0.9 (0.6–1.3)
Very or fairly unsure	288	12 (4)	Reference	103 (36)	Reference

(continued)

Table DS5 *(continued)*

Variable	*n*	Positive change		Negative change (%)	
		n (%)	odds ratio (95% CI)	*n* (%)	odds ratio (95% CI)
I felt I might be injured or killed					
Yes	26	0 (0)	–	14 (54)	2.3 (1.0–5.1)*
No	548	22 (4)	Reference	177 (32)	Reference
I felt that a family member or close friend might be injured or killed					
Yes	352	12 (3)	0.9 (0.4–2.0)	129 (37)	1.5 (1.0–2.1)*
No	222	10 (5)	Reference	62 (28)	Reference
I saw someone who was injured or killed					
Yes	16	0 (0)	–	5 (31)	0.9 (0.3–2.5)
No	558	22 (4)	Reference	186 (33)	Reference
A family member or close friend was injured or killed					
Yes	17	0 (0)	–	5 (29)	0.8 (0.3–2.3)
No	557	22 (4)	Reference	186 (33)	Reference
Consultation with a mental health specialist prior to the bombings					
Yes	112	3 (3)	0.7 (0.2–2.5)	44 (39)	1.4 (0.9–2.1)
No	461	19 (4)	Reference	147 (32)	Reference

*$P < 0.05$.

Table DS6 Predictors of positive or negative changes to view of self 7–8 months after the London bombings

Variable	*n*	Positive change		Negative change (%)	
		n (%)	Odds ratio (95% CI)	*n* (%)	Odds ratio (95% CI)
Gender					
Female	316	22 (7)	0.8 (0.4–1.5)	19 (6)	1.1 (0.5–2.2)
Male	258	22 (9)	Reference	14 (5)	Reference
Age, years					
18–24	48	5 (10)	2.2 (0.5–8.5)	3 (6)	1.3 (0.3–6.1)
25–44	272	26 (10)	2.0 (0.7–5.8)	16 (6)	1.2 (0.4–3.7)
45–64	175	9 (5)	1.0 (0.3–3.3)	10 (6)	1.1 (0.3–3.6)
65+	77	4 (5)	Reference	4 (5)	Reference
Social class					
A/B	188	11 (6)	0.7 (0.3–1.8)	10 (5)	0.7 (0.3–2.1)
C1/C2	284	26 (9)	1.1 (0.5–2.7)	16 (6)	0.8 (0.3–2.1)
D/E	85	7 (8)	Reference	6 (7)	Reference
Working status					
Full-time	279	29 (10)	2.1 (1.1–4.1)*	14 (5)	0.9 (0.4–1.8)
Not full-time	294	15 (5)	Reference	18 (6)	Reference
Residential location					
Inner London	210	19 (9)	1.3 (0.7–2.4)	7 (3)	0.5 (0.2–1.1)
Outer London	364	25 (7)	Reference	26 (7)	Reference
Housing tenure					
House owner	395	28 (7)	0.7 (0.4–1.4)	19 (5)	0.7 (0.3–1.4)
Renting/other	176	16 (9)	Reference	12 (7)	Reference
Ethnicity					
White	453	27 (6)	0.4 (0.2–0.7)*	24 (5)	0.6 (0.3–1.4)
Other	121	17 (14)	Reference	9 (7)	Reference
Religion					
Muslim	35	4 (11)	1.8 (0.8–5.3)	6 (17)	3.7 (1.3–9.8)*
None	132	8 (6)	0.8 (0.3–1.6)	4 (3)	0.5 (0.2–1.5)
Other faith	405	32 (8)	Reference	23 (6)	Reference
Household income					
Under £30 000	250	18 (7)	0.8 (0.4–1.5)	15 (6)	1.2 (0.6–2.6)
Over £30 000	262	24 (9)	Reference	13 (5)	Reference
Parental status					
Children under 18	173	18 (10)	1.8 (0.9–3.3)	15 (9)	2.1 (1.0–4.3)*
No children under 18	401	26 (7)	Reference	18 (5)	Reference
Before the bombings, did you know what to do in the event of a terrorist attack?					
Yes	179	10 (6)	0.8 (0.4–1.8)	13 (7)	2.0 (0.9–4.7)
No	268	19 (7)	Reference	10 (4)	Reference
Read government leaflet					
Yes	239	12 (5)	0.5 (0.3–1.0)	17 (7)	1.5 (0.7–2.9)
No	335	32 (10)	Reference	16 (5)	Reference
Prior experience of terrorism					
Yes	198	24 (12)	2.5 (1.3–4.7)*	13 (7)	1.4 (0.7–2.8)
No	376	20 (5)	Reference	20 (5)	Reference
Certainty about others					
Very or fairly sure	239	13 (5)	0.6 (0.3–1.2)	14 (6)	1.2 (0.5–2.5)
Very or fairly unsure	288	26 (9)	Reference	14 (5)	Reference

(continued)

Table DS6 *(continued)*

Variable	*n*	Positive change		Negative change (%)	
		n (%)	Odds ratio (95% CI)	*n* (%)	Odds ratio (95% CI)
I felt I might be injured or killed					
Yes	26	0 (0)	–	6 (23)	5.3 (2.0–14.3)*
No	548	44 (8)	Reference	27 (5)	Reference
I felt that a family member or close friend might be injured or killed					
Yes	352	31 (9)	1.6 (0.8–3.2)	25 (7)	2.1 (0.9–4.8)
No	222	13 (6)	Reference	8 (4)	Reference
I saw someone who was injured or killed					
Yes	16	0 (0)	–	1 (6)	1.0 (0.1–7.8)
No	558	44 (8)	Reference	32 (6)	Reference
A family member or close friend was injured or killed					
Yes	17	2 (12)	1.9 (0.4–8.9)	3 (18)	4.0 (1.1–15.1)*
No	557	42 (8)	Reference	30 (5)	Reference
Consultation with a mental health specialist prior to the bombings					
Yes	112	9 (8)	1.1 (0.5–2.4)	11 (10)	2.2 (1.0–4.7)*
No	461	35 (8)	Reference	22 (5)	Reference

$P < 0.05$.

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