Suicide terrorists: Are they suicidal?

Author: Ellen Townsend

Author responsible for correspondence: Ellen Townsend, BA (Hons), PhD.

Author Affiliation: Risk Analysis, Social Processes and Health group, School of Psychology,

University of Nottingham, UK

Address: School of Psychology, University of Nottingham, University Park,

Nottingham, NG72RD, UK.

Tel: ++ 44 (0115) 8467305

Fax: ++ 44 (0115) 9515324

Email: ellen.townsend@nottingham.ac.uk

Suicide terrorists: Are they suicidal?

Abstract

This paper investigates whether suicide terrorists are suicidal. A review of the worldwide literature on suicide terrorism uncovered five published empirical studies describing data collected from potential suicide terrorists or the surviving friends and families of deceased terrorists. The many discrepancies uncovered between suicide terrorists and other suicides, on key factors known to underpin suicidality, suggest that such terrorists are not truly suicidal and should not be viewed as a subgroup of the general suicide population. Nonetheless, methods developed by suicidologists, such as the psychological autopsy, will help increase our understanding of the individual and group factors which underpin suicide terrorism.

Introduction

Interest in understanding the psychological and psychiatric underpinnings of suicide terrorism has increased dramatically in recent years. Suicide attacks are a deadly practice most commonly carried out by extremist and fundamentalist groups (Atran, 2003; Dale, 1988; Salib, 2003; Silke, 2003). The scale of the acts of suicide terrorism on September 11th 2001 ensured that the devastating results of such attacks are now viewed as world-wide phenomena and have deeply affected many of those who live in western societies (Lerner, Gonzalez, Small, and Fischhoff, 2003). Unfortunately suicide terrorism appears to be rising across the globe (Pape, 2003; 2005) and understandably the academic community, across disciplinary boundaries, has been galvanised into action to try to elucidate the key factors that underpin such violent and hostile behaviour. Recently it has been suggested that (a) suicide terrorists are similar to 'altruistic suicides', and that (b) suicide terrorists, owing to their altruistic nature, share similar characteristics to others who die by suicide (i.e. not just altruistic type suicides) (Leenaars and Wenckstern, 2004).

It is widely acknowledged that there is no such thing as a 'typical suicide'. Suicides occur as a result of diverse interacting social (eg, unemployment), personal (eg. relationship problems) and clinical (eg. depression) factors. Clearly, this complexity makes both the investigation and treatment of suicidal behaviour a very challenging task and leading researchers in the area have suggested that the study of sub-groups of the suicidal population is a useful future direction for research (Hawton and van Heeringen, 2000). So perhaps, to some extent, it is understandable that some researchers wish to treat suicide terrorists as a subgroup of the general suicide population.

The aim of this study was to review the available literature to try to determine the degree to which suicide terrorists are actually suicidal, and to examine whether such terrorists should be considered as a 'sub-group' of the general suicide population. Accordingly, a

comprehensive literature review was conducted. The following databases were searched to identify papers that had investigated suicide terrorism: PubMed (1950-September 2005), PsychInfo (1872-September 2005) and Web of Science (Science Citation Index Expanded 1945-September 2005; Social Sciences Citation Index 1956-September 2005; Arts and Humanities Citation Index 1975- September 2005). The following search terms were used "suicid* and bomb*", "suicid* and terror*", "suicid* and altruis*", "suicid* and martyr*"; "suicid* and attack*". An internet search was also conducted using 'Google Scholar' to identify 'grey materials' pertinent to this issue using the search terms specified above. References lists of articles identified in the database searches were checked.

The search of the available literature yielded few empirical studies of suicide terrorism, which is understandable given the practical difficulties of involved with studying the behaviour of these individuals. Just five of the published reports uncovered were empirical studies that had examined suicide terrorism in a direct way with human participants involved with suicide terrorist activity (Fields, Elbedour, and Hein, 2002; Hassan, 2001; Meloy, 2004; Post, Sprinzak, and Denny, 2003; Schbley, 2003) and only three of these studies appeared in peer-reviewed journals (Meloy, 2004; Post et al., 2003; Schbley, 2003). Brief details about the five empirical studies identified in the review may be viewed in Table 1.

Insert Table 1 about here

As most of the very scarce evidence uncovered during the literature search related to suicide terrorism in Palestine or by Islamic fundamentalists around the world, the scope of this article is focused on this type of suicide attack (though there is likely to be overlap with other types of suicide terrorism – such as those carried out by the Tamil Tigers). Moreover, this focus is also warranted given that the attention of scholars around the globe has

understandably turned to uncovering the psychology of Islamic fundamentalist groups (Victoroff, 2005). In the sections that follow, a number of important issues which emerged repeatedly in the suicide terrorism literature are discussed in relation to existing knowledge about, and theoretical perspectives on, suicidal behaviour. These issues, along with the similarities and differences observed between terrorist suicides and other suicides are summarized in Table 2.

Table 2 about here

Is suicide terrorism an example of altruistic suicide?

Recently, some authors have suggested that suicide terrorists should be considered to be the same as other suicides - especially 'altruistic suicides' (suicide based on sacrificing oneself for the good of others) (Leenaars and Wenckstern., 2004; Stack, 2004). Leenaars and Wenckstern (2004) note:

> Suicidology is not alone in wrestling with the question, 'who are the altruistic suicides?' – the suicide bomber, the terrorist, the martyr, the soldier who dies to save his friends, the Hindu woman who climbs on the funeral pyre to be with her husband forever. (p.131)

They highlight the paucity of evidence relating to altruistic suicide (they identified just one paper – a qualitative study (Park, 2004), and used evidence (two martyrdom notes) from this study to claim that these notes were the same as other suicide notes they have studied (Leenaars and Wenckstern., 2004). However, the 'martyrdom notes' used here to support their similarity claim are actually those of 'self-immolators' – individuals who have burned themselves to death as a protest but without harming others (B.C.P. Park, personal communication, November 2nd, 2005). Hence, this is insufficient evidence on which to base the claim that suicide terrorists should be considered as the same as other suicides, altruistic or otherwise. What Park's (2004) study does reveal is that *self-immolators* may fit the model

of an altruistic suicide, but it is not appropriate to extend these findings to the case of suicide terrorists who kill both themselves and others. Indeed, a crucial omission from both the notes analysed by Leenaars and Wenckstern (2004) was the intent of the self-immolators to take other lives at the same time as taking their own life, whereas in suicide terrorists this has been revealed in another form of 'martyrdom note' – the pre-act video (also known as video testaments (Atran, 2003)). A further consideration which separates the acts of self-immolators from suicide terrorists is the fact that self-immolation is rarely even considered a terrorist act since the act is not intended to cause terror but rather to elicit sympathy and understanding from a target audience (Niebuhr, 1960).

Recently it has been suggested that although suicide terrorists may fit the 'altruistic type' of suicide, they also possess elements of 'fatalistic type' suicide in that the persons carrying out these acts are subject to political totalitarianism (Pedahzur, Perliger, and Weinberg, 2003). However, this assertion is based on the concepts of altruistic and fatalistic suicide from Durkheim's typology using data gathered from reports from the Israeli newspaper "Ha'aretz", which as the author's acknowledge are likely to be both censored and biased according to the viewpoint of the editor or the writer of the articles. Thus, results of this study are unlikely to accurately reflect the cases they report on.

It is important to question how plausible it is to equate suicide terrorists, who take not only their life but also the lives of many others, with other altruistic suicides where physical harm is reserved solely for the person carrying out the suicidal act. Most classic examples of altruistic suicide do not involve the death of others in the altruistic act (with the exception, perhaps, of Kamikaze pilots). However, even if we do accept the notion that suicide terrorists may possibly belong to a new category of altruistic suicide, it is unlikely that altruism will be the sole cause for the behaviour. Even a brief glance at the suicide literature reveals that suicide is a truly multifaceted problem. It has been characterised as a 'multidimensional

malaise' (Leenaars, 1996) involving a complex interaction and sequencing of events each having social, biological and psychological influences. There is no one cause for suicide (e.g. O'Carroll, 1993), meaning that altruism is unlikely to be the only factor contributing to a so-called altruistic suicide. Moreover, a number of authors claim that the actions of terrorists are stimulated by a wide set of motives (Moghadam, 2003; Salib, 2003; Silke, 2003). If altruism alone does not motivate suicide terrorism, the question remains 'What does?' Importantly for this paper, we need to examine whether motivations for suicide terrorism and other suicides are similar.

Motivations for suicide and suicide terrorism

Empirical research from suicide notes, psychological autopsy studies and interview-based studies of survivors of suicide attempts highlights that diverse reasons are given for suicidal behaviour including problems with money, relationships, employment, mental health, drugs and alcohol, to name but a few.

It appears impossible to describe a 'typical suicide' generally. Neither is it possible to describe a 'typical' suicide terrorist (Silke, 2003). However, Merari (2005) has discussed the profile that many suicide terrorists share across a range of demographic, social and psychological variables. For example, we do know that generally suicide cells prey on young, unattached men (Atran, 2003; Merari, 2005) and that these young men have deeply held religious beliefs in common (Hassan, 2001). Some authors argue that religious beliefs are absolutely crucial in understanding motivations for suicide attacks (Orbach, 2004; Salib, 2003). One Muslim psychologist rejects the idea that suicide terrorism involves suicide at all, suggesting instead that it is an act of martyrdom, based on the Islamic principles of Jihad (holy war), which, as such is considered as legal behaviour (Abdel-Khalek, 2004). It is important to note here that Islam forbids suicide – it is not sanctioned under any circumstance

(Abdel-Khalek, 2004; Taylor and Ryan, 1988). A terrorist interviewed in one study became angry when asked a question about suicide saying, "This is not suicide. Suicide is selfish, it is weak. This is *istishad* [martyrdom or self sacrifice in the service of Allah]." (Post et al., 2003, p. 179).

Hassan (2001), who interviewed nearly 250 individuals from various militant Palestinian camps in Gaza between 1996 and 1999, claims that suicide terrorists are all extremely religious and believe their actions to be sanctioned by Islam. Indeed, some research on suicide terrorist groups suggests that suicide terrorists are indoctrinated into believing in their own immortality. They are convinced of this (Hassan, 2001; Orbach, 2004), and convinced that the paradise into which they will ascend manifests itself as an actual physical presence for them. Belief in gaining entrance to such an afterlife has been cited as a likely motivating factor in suicide-terrorist behaviour (Williams, 1997). This is confirmed by evidence from an interview with a 27-year-old man selected for a suicide attack. When asked how he felt about being selected he replied (Hassan, 2001):

It's as if a very high, impenetrable wall separated you from Paradise or hell. Allah

has promised one or the other to his creatures. So, by pressing the detonator, you

can immediately open the door to paradise - it is the shortest path to heaven. (¶6)

An interview with an Imam affiliated with Hamas corroborates these beliefs. Hassan (2001) reports the Imam as saying that:

… the first drop of blood shed by a martyr during jihad washes away his sins

instantaneously. On the Day of Resurrection, he can intercede for seventy of his

nearest and dearest to enter heaven; and he will have at his disposal seventy-two

houris, the beautiful virgins of Paradise. (¶25)

Taylor and Ryan (1988) describe the 'bassamat al-farah' - the so-called smile of joy of religious martyrs worn at the time of martyrdom. They note that "martyrdom, because of its promise of merit hereafter, is an act of joy, symbolized by this smile" (p. 102). Using post-mortem interviews with the families and friends of deceased suicide terrorists one study showed that eight of the nine terrorists were described as being very religious (Fields et al., 2002).

Such findings clearly highlight the importance of religious beliefs in suicide terrorism. Some of the research conducted to date demonstrates that religious beliefs are crucial in understanding the willingness to become a suicide terrorist. On the basis of a content analysis of texts about suicide terrorism Kimhi and Even (2004) suggest that a religious prototype of suicide terrorism exists. And, worryingly, it is thought that religious fundamentalist suicide terrorists may pose the greatest danger to society (Post et al., 2003). However, others claim that not all Islamic suicide terrorism is religiously motivated and that political forces are more important in the development of suicide terrorism (Merari, 1998, 2005; Sprinzak, 2000). Of course, a range of motivations for suicide terrorism exist and these have been discussed by Moghadam (2003), who proposed a two-phase model of suicide terrorism encompassing individual and organizational goals.

Nonetheless, having established that religion is a key factor in motivating many suicide terrorists we must now consider whether such religiosity is a factor in other types of suicidal behaviour. The very latest research demonstrates that religious beliefs may actually protect against suicidal behaviour (Dervic et al., 2004; Nonnemaker, McNeely, and Blum, 2003). A study of depressed inpatients found that patients who reported no religious affiliation had more lifetime suicide attempts than those who reported having a religious affiliation (Dervic et al., 2004). Data from the National Longitudinal Study of Adolescent Health in the USA demonstrated that private religiosity (measured by frequency of prayer and

the importance of religion) was associated with a significantly lower probability of having had suicidal thoughts or having engaged in suicidal behaviour (Nonnemaker et al., 2003). So whilst protective against suicide in the general population, strong religious beliefs may actually be a significant risk factor in becoming a suicide terrorist.

Another motivation that may be prominent here is vengeance, that is, 'getting back' at someone (Beck, 2002; Moghadam, 2003; Rosenberger, 2003), especially at those in authority (Pape, 2003). Rosenberger (2003) argues that the idea of vengeance in suicide terrorism is crucial to understanding the suicide attacker and Adbdel-Khalek (2004) reports that the notion of vengeance appears to be a central element of the philosophy of martyrdom in relation to what is called the Palestinian cause.

Personal revenge is a possible motivation for a suicide mission (Fields et al., 2002; Kushner, 1996; Moghadam, 2003). It appears that the terrorists nearly always have a relative or close friend who has been wronged or even killed by the perceived enemy, and so join terrorist organizations in a vengeful frame of mind (Kushner, 1996). Fields et al. (2002) report that five of the nine suicide terrorists they studied in a case-controlled post-mortem study had been injured as a result of the *intifada* in Gaza. Eight of their subjects had been imprisoned and tortured during this time, and five of eight families of the terrorists were reportedly beaten and humiliated by soldiers. Seven families of the deceased suicide terrorists felt one motivation for the bomber had been a response to the injustices they had perceived to be perpetrated by Israeli occupation.

In contrast, the explanations of suicidal individuals for their behaviours rarely relate to vengeance or coercion - the reasons most commonly chosen by the suicidal include loss of control and escape (Bancroft et al., 1979). Vengeance, though not common, is found to be a motivator for some completed suicides. For example, some data support the notion of revenge via suicide by women suffering abuse (Counts, 1987; Meng, 2002). However, it is important

to note that this sort of 'revenge suicide' does not involve physical harm to others as part of the suicide act.

A final, yet crucial, point to make about the potential motivational differences between terrorist suicides and other suicides is that there is a strong instrumental element to the motive of the suicide terrorist. After all, the real goal of suicide terrorism is to create terror (Pape, 2003), with the ultimate aim of effecting religious or political change, which is certainly not the case with suicides in general. So, to summarize, the motives of suicide terrorists appear to be very different indeed to other suicides, which concurs with the latest writings of at least one expert on political terrorism (see Pape, 2005).

Murderous, not suicidal, intent

The preceding sections suggest that suicide terrorists differ from the vast majority of other suicides in a number of ways. A large discrepancy between suicide terrorists and non-terrorist suicides is that suicide terrorists are murderers. Their own suicide act deliberately takes the life of another, or many others. And the primary intention of the act carried out is murder rather than suicide - in fact suicide here can be viewed as a 'by-product' of the attack (B.C.B. Park, personal communication, November 2nd, 2005). Whether for religious, moral, vengeful or altruistic reasons, the fact is that in most suicides there is an absence of murderous intent and this factor in itself separates most suicides from suicide terrorists.

Perhaps then, the subgroup of the suicide population which could be thought of as most closely related to suicide terrorists is homicide-suicides (formerly called murder-suicides). These suicides are very rare indeed. One study found that of the 600,000 deaths which occur in England and Wales each year an average of 60 occur in homicide-suicide incidents (Barraclough and Harris, 2002). If we consider this figure in the context of the number of suicides in 2002 (N = 4,755) (National Statistics, 2005), it becomes clear that these

kinds of suicide are indeed extremely rare - constituting around 1.3% of all suicides. In the US the rate of homicide-suicides appears to be very similar accounting for around 1.5% of all suicides (Marzuk, Tardiff, and Hirsch, 1992).

However, even within this tiny subgroup of the suicide population a clear difference exists between homicide-suicides and suicide terrorists. In homicide-suicides the majority of incidents involve one victim and one suspect, and in around 90% of incidents family members are victims - these usually being the female partners of male suspects (Berman, 1979; Barraclough et al., 2002; Chan, Beh, and Broadhust, 2003; Marzuk et al., 1992). In contrast, suicide attacks typically involve many victims and one suspect, where the victims are unknown to the killer. Moreover, it is interesting to note that the overwhelming majority of homicide-suicide acts involve enmeshment and vengeance between the victim and the perpetrator (Berman, 1979). Whereas, for the suicide terrorist, it is likely that enmeshment occurs with his or her peer group (Lachkar, 2002), not with the victims of the attack. Another significant difference between many homicide suicides and suicide attacks is the temporal spacing of the acts of homicide and suicide. In suicide terrorism the acts are simultaneous whereas homicide-suicide has been defined as "a person [who] has committed a homicide and subsequently commits suicide within one week of the homicide" (Marzuk et al., 1992; p. 3179). (Though it should be noted that this is not the only definition of homicide-suicide and other researchers do not apply the one week criterion when defining homicide-suicide – see Berman (1979) - for example)). Thus, even if we try to take homicide-suicides as the closest relative to suicide terrorists from the 'general suicide population', it is clear that there are large and important differences between key characteristics of the two types of behaviour, and between the victims of these acts.

Moreover, there is little evidence to suggest the existence of suicidal intent in most suicide terrorists. Atran (2003) claims that suicidal symptoms are completely absent in suicide

terrorists. In fact suicidal intent is actively and emphatically denied by those involved in carrying out such attacks (Post et al., 2003; Schbley, 2003). This is perhaps unsurprising given the belief that the suicide terrorist's act ensures an afterlife which manifests itself as a real physical presence, and that suicide is forbidden in Islam (Abdel-Khalek, 2004). Recall the sentiments expressed by participants in the studies quoted earlier in this paper - where the vilification of suicide was apparent and the notion that suicide terrorists are suicidal was completely denied (Hassan, 2001; Post et al., 2003).

Is there a common psychology?

It has been hypothesized that suicide terrorists may be psychologically similar to other suicides in terms of their desire to remove themselves from an intolerable situation 'due to unmet emotional needs' (Leenaars and Wenckstern, 2004; p.134). Indeed, Salib (2003) claims that anger and hopelessness may be primary motivations for the suicide terrorist. Is this at least one area of overlap between the general suicide population and suicide attackers? Do these terrorists exhibit the common features of important psychological models of suicidal behaviour, such as that described so elegantly by Mark Williams in his 'Cry of Pain' theory? (Williams, 1997; Williams and Pollock, 2000). According to Williams suicidal acts are the cries of pain from individuals who are defeated in some important aspect of their lives and feel trapped in that situation without hope of escape or rescue. Leading suicidologists suggest that suicidal acts must fundamentally be understood as behaviours 'aimed at obtaining relief from an unbearable mental state' (Michel, 2000, p. 666). For example, Shneidman (e.g. 1996) claims that suicide is caused by psychological pain which he terms 'psychache'. Are the psychological features of entrapment, defeat and unbearable mental pain common features of suicide terrorists? By all accounts they feel quite the opposite. Due to their strong belief in their cause they go to their death feeling hopeful rather than hopeless, believing that their

death will bring about certain specific gains such as achieving entrance to an afterlife, being an inspiration to others and thus advancing their cause, and delivering others from suffering (Williams, 1997). Also, Atran (2003, p. 1537) claims that suicide terrorists do not demonstrate hopelessness or a sense of 'nothing to lose'.

Another psychological feature of violent suicides is aggression (Apter, Brown, Korn, and van Praag, 1990). Anger and aggression certainly seem to be important factors in suicide attacks too (Atran, 2003), but it crucial to note that the available research suggests that majority of suicide terrorists are likely to have been skilfully manipulated into feeling the way they do largely as result of intra-group and inter-group processes fuelled by religious beliefs (Atran, 2003: Beck 2002; Hassan, 2001; Post et al., 2003; Salib, 2003). This is very different to the aetiology of anger in other suicides which seems to be mediated by biological mechanisms, (namely the serotonin system (Apter et al., 1990)) and exacerbated by interacting personality, social and psychological factors (Mann, Waternaux, Haas, and Malone, 1999; Williams, 1997). Suicides involving violent methods are known to have a strong impulsive component that is biologically mediated by the serotonin system (Bertolote, Fleischmann, and Wasserman, 2005; Träskman, Åsberg, Bertilsson, and Sjostrand, 1981). The impulsive element of such violent suicidal acts appears to be completely absent in the suicide terrorist where careful, meticulous plans are made. Furthermore, given the rich rewards believed to be awaiting the terrorist it is unlikely that s/he goes to his or her death feeling negative emotions. (Indeed this hypothesis is supported by empirical research with would-be suicide attackers (Hassan, 2001; Post et al., 2003)).

Another point of potential psychological commonality worth considering here is the prevalence of mental illness in suicide terrorists - as compared to other suicides. The incidence of diagnosable mental illness is high in both attempted (Haw, Hawton, Houston and Townsend, 2001) and completed suicides (Arsenault-Lapierre, Kim, and Turecki, 2004;

Bertolote et al., 2005; Cavanagh, Carson, Sharpe, and Lawrie, 2003; Lonnqvist, 2000).

Depression is a particular problem in both completed and attempted suicides, however, this

does not seem to feature in suicide terrorism. Atran (2003) claims that suicide terrorists are

'non-pathological' and that the problem faced by researchers is to determine why so many of

these individuals are recruited in order to carry out the wishes of the organizations who

prepare suicide terrorists. It is not clear whether the incidence of mental illness in suicide

terrorists is higher than in the general population (Lamberg, 1997). Neither is it known

whether the incidence rate is equivalent to that observed in the suicide population. To the best

of our knowledge suicide terrorists do not carry out their terrorist acts as a result of mental

illness (Bond, 2004; Colvard, 2002; Gordon, 2002; Hassan, 2001; Merari, 2005; Williams,

1997). Williams (1997) describes the potential clinical and psychological differences between

suicide attackers and other people who commit suicide. He notes:

> Most people who commit suicide are depressed when they do so; they see death as the end
>
> to their suffering. One of two feelings usually predominates in the mind of the person who
>
> is suicidal in this depressive sense, both stemming from hopelessness. The first is that
>
> have been abandoned by everyone; the second that they are a burden to everyone,
>
> especially to those they love. Contrast this with the martyr. They see hope and believe in a
>
> cause. (p. 111)

The role of group processes and indoctrination

Perhaps a major motivational and psychological difference between suicide terrorists and

other suicides is whether the decision to act is made at the level of the individual or at the

level of the group, mediated by those in authority. A number of authors have noted that the

decision to 'act' as a suicide attacker is not arrived at in isolation (Atran, 2003; Burdman,

2003; Moghadam, 2003; Rosenberger, 2003; Volkan, 2002). Rather, it seems that the

terrorists are coached to their deaths (remembering that death is probably not the perceived end point for the suicide terrorist). Indeed, Atran (2003, p. 1536) notes that, "No instances of religious or political suicide terrorism stem from lone actions of cowering or unstable bombers". It seems that the decision to send out a suicide terrorist is almost always made by others (Poland, 2002). Perhaps then, such terrorist behaviour is better explained by group processes than by mental disorder (Colvard, 2002).

Atran (2003) draws a comparison with Milgram's famous obedience to authority experiments in which ordinary individuals obey orders and perform actions which are detrimental to others in the right circumstances (Milgram, 1974). He claims that it is the 'sense of obligation' in response to authority that drives suicide attacks rather than murderous intent. Indeed, murderous intent may not exist at the level of the individual, but rather in relation to those in authority organising the suicide attacks (Merari, 1998; 2005; Rosenberger, 2003). Rosenberger (2003) argues that "The leaders, in fact, are murdering their suicide bombers pure and simple" (p.17). However, it is extremely doubtful that the indoctrination experienced by a suicide attacker means that they lack murderous intent altogether.

An interview study with thirty five incarcerated Middle-Eastern terrorists revealed that the major reason for joining a terrorist group in the first place was peer influence because it seemed that everybody was joining up (Post et al., 2003). Moreover, Atran (2003, p. 1537) claims that 'loyalty to [an] intimate cohort of peers, which recruiting organizations often promote through religious communion' is crucial to understanding suicide terrorism. Meticulous plans are made, often in groups or cells of about three to six individuals who are lead to death by a charismatic leader (Atran, 2003; Poland, 2002). In some cases the individual is carefully selected and prepared for suicide attacks but in other cases extreme coercive measures are used (Ergil, 2001; Post et al., 2003; Silke, 2003).

Of course group and individual processes must interact in order to produce a suicide attacker. Once selected for a suicide terrorism mission a processes of indoctrination occurs to strengthen motivation for carrying out the attack and prevent it from dissipating. Indoctrination typically takes place in a number of stages and each stage relies on cognitive, emotional and social psychological processes. Moreover, certain personal characteristics may increase the likelihood of an individual's susceptibility to indoctrination including religious or political values that resonate strongly with the indoctrinating organisation (Baron, 2000). For example, in suicide terrorism indoctrination may be driven by religious (eg. the reward of martyrs in the afterlife) or nationalist themes (eg. the humiliation of Palestine by Israel) (Merari, 2005). For example, a member of Hamas explained the 'preparation' of a suicide terrorist as follows (Hassan, 2001):

> We focus his attention on Paradise, on being in the presence of Allah, on meeting the Prophet Muhammad, on interceding for his loved ones so that they, too, can be saved from the agonies of Hell, on the houris and on fighting the Isralie occupation and removing it … (¶30)

Two 'assistants' stay with the would-be suicide attacker at all times in the week before an attack and they report any wavering or doubts to a senior trainer who can be called in to provide inspiration and support (Hassan, 2001). However, Silke (2003) notes that it is "increasingly recognised that it is a mistake to view suicide bombers as brainwashed pawns" (p. 94). Worryingly, it appears that there is a surfeit of would-be recruits to suicide cells who are virtually beating down the doors of those in power to get involved (Hassan, 2001).

Nonetheless, would-be terrorists have described how membership of the terrorist group served to fuse their personal identity with the collective identity and goals of the group (Post et al., 2003). Volkan (2002) claims that vulnerabilities in a person's identity permit the imposition of a wider group identity. Israeli (1997) has suggested that suicide attackers may

suffer from low self-esteem, which increases vulnerability in relation to powerful peer influences and reactions to those in authority. However, in a roughly case-controlled post-mortem interview study of a small group of suicide terrorists no evidence of lowered self-esteem was uncovered (Fields et al., 2005).

Hence, crucial to understanding suicide terrorism is an appreciation of the group processes in indoctrinating organizations (Atran, 2002; Merari, 1998, 2005; Moghadam, 2003; Schbley, 2003). Some authors have argued that these processes are more important in determining suicide attacks than religious beliefs (e.g. Merari 1998; 2005). (However, a recent psychometric study administered opportunistically to over 300 potential suicide terrorists (members of Hizbullah attending a parade to celebrate the Day of Jerusalem) demonstrated that respondents who were high school-educated, had the highest level of religious training and the highest levels of religiosity were most willing to become suicide attackers (Schbley, 2003)).

Psychology and psychiatry have a pivotal role to play in furthering the understanding of group and individual processes which contribute to terrorist attacks, and may ultimately contribute to the prevention of future attacks. We know something about the factors underpinning hostility between groups in terms of the influences on inter-group bias (Hewstone, Rubin, and Willis, 2002; Reed II and Aquino, 2003; Tzeng and Jackson, 1994) and determining what can be done about such biases and conflict between groups (Beck 2002; Hewstone et al., 2002). But specific research on in-group/out-group hostility and other group processes which influence the development of suicide terrorism is now required. Green and Seher (2003) recently highlighted the fact that the academic literatures on prejudice and ethnic conflict have developed separately and that an integrated research synthesis in this area is now needed.

The role of the media in fostering out-group hostility and reinforcing the impact of suicide attacks must also be explored. To some degree, by highlighting the impact of such attacks, the media may serve to promote both recruitment to suicide cells and copycat terrorist behaviour. The widely documented influence of media portrayals on suicidal behaviour has lead to the development of media guidelines to help prevent contagion effects. Guidelines may now be required for handling media reports of suicide attacks.

Another factor which warrants discussion in relation to group processes is the need to understand why some individuals are more likely to become influenced sufficiently to be willing to die as suicide attackers. Two factors emerge as crucial in this review. First, the possibility that individual differences in personality may be important, and second, the role of strong religious beliefs (it is possible, of course, that these factors may interact in the development of a suicide attacker).

In terms of possible personality foundations to suicide terrorism Lachkar (2002) proffers a theory outlining the personality characteristics of suicide terrorists based on a psychoanalytical approach. The theory highlights the role of parenting - particularly in relation to the terrorist's relationship with his/her father. Dysfunctional parenting is thought to contribute to the development of borderline-type personality traits. She argues that this ultimately leads to suicide cells developing gang-like group dynamics such that the terrorist cell becomes enmeshed with the terrorist's sense of identity. Her assertions are not, however, backed up with empirical evidence though this claim is supported by the work of Post et al. (2003) who report that membership of terrorist groups for 35 incarcerated Middle Eastern terrorists involved the melding of individual and group identity. Thus, a possible risk factor for becoming a suicide terrorist exists at the level of individual personality. However, some authors insist that there is no such thing as suicide terrorist personality type, and claim that suicide terrorists come from a variety of backgrounds with diverse personalities and

motivations (Hassan, 2001; Schbley, 2003; Silke, 2003; Victoroff, 2005). However, as noted above it is likely that certain personal characteristics lead certain individuals to be more susceptible to indoctrination techniques than others (Baron, 2000). It seems, then, that although strong empirical evidence is currently lacking, psychology and psychiatry could play a vital role in the future investigating the influence of personality, personality disorders and psychiatric disorders in the development of suicide terrorist behaviour.

The group processes described above are entirely absent in most other cases of suicide, who somehow arrive at the decision to die on their own, and who die alone. Most notably, the degree of planning observed in suicide terrorists is not apparent in most other suicides. As Stengel, (1964) once noted, "Carefully planned acts of suicide are as rare as carefully planned acts of homicide" (p. 74). There are some other examples of suicides involving group (eg. cult suicides) and dyadic processes (eg. suicide pacts). But these are very rare. And as before, a fundamental difference between these acts and suicide attacks is that innocent victims are not killed as part of the suicidal behaviour.

Conclusions and recommendations for future research

The first thing to note about the results presented here is the lack of empirical work that has been conducted on psychological and psychiatric underpinnings of suicide terrorism. On the basis of the sparse evidence uncovered in this review it appears that there are few, if any, factors which are truly common to both suicide terrorists and other suicides. Neither is it clear whether the suicide terrorist should be considered as a type of altruistic suicide - I am not alone in questioning this postulation (see for example Abdel-Khalek (2004). It is possible that the suicide terrorist could be considered an atypical variant of the category of altruistic suicide (Leenaars and Wenckstern, 2004) or as a new type of 'fatalistic-altruistic' suicide (Pedahzur et al., 2003), but the data that support these claims are potentially misleading in important

ways and lack strong empirical evidence to validate them. It is also possible that the notion of altruistic suicide requires adjustment to permit a distinction to be made between those who harm others and those that do not.

However, a number of authors have questioned whether suicide terrorists should be viewed as cases of suicide at all (Israeli, 1997; Spencer, 2002) indeed those carrying out such acts deny absolutely that what they are doing involves suicide (Post et al., 2003; Schbley 2003). Rather, these acts are viewed as a form of martyrdom (Abdel-Khalek, 2004: Kushner, 1996; Post et al., 2003; Schbley 2003), which appear to be largely driven by religious beliefs, social pressure and group processes (Atran, 2003; Gordon, 2002; Moghadam, 2003). Having considered some of the key factors underpinning suicidal behaviour and examining how these factors apply to suicide terrorists it is probably more profitable to view the actions of suicide terrorists as a different class of behaviour altogether, rather than as a subgroup of the general suicide population. That is to say, suicide terrorists do not appear to be truly suicidal in the sense that suicidal behaviour is usually defined and understood.

Importantly, significant differences appear to exist between suicide terrorists and other suicides in terms of key factors known to underpin suicide in the general population including social, biological, psychological and psychiatric problems. Even the characteristics of the closest related subgroup, which is probably that of the homicide-suicide, are shown to differ markedly with what (little) is known about suicide terrorist behaviour. An important feature of the suicide terrorism process which is absent in the general suicide population (with the exception of a small number of mass suicides and suicide pacts) is the coercive processes used by those in authority.

On balance, the available evidence demonstrates that suicide terrorism has a range of characteristics which, when examined closely, are shown to be very different from other suicidal behaviour. Even where overlap appears to exist, significant and important differences

are found which suggests that treating suicide terrorists as a subgroup of the general suicide population is unlikely to increase our understanding of suicidal behaviour. Instead, it is more useful to consider suicide terrorism as a dimension of terrorist behaviour and the suicide terrorist as belonging to a subgroup of the terrorist population. Nonetheless, researchers wishing to understand the behaviour of suicide terrorists could profit from adopting commonly used methods in suicidology. One example is the psychological autopsy method which has been used to great effect to increase our understanding of key psychological, medical and psychiatric factors associated with suicide. For example, a study of young people who died by suicide showed that over half had expressed suicidal thoughts within the year before death and over 40% had made clear statements of intent within a month before death (Houston, Hawton, and Shepperd, 2001). Such research has helped us understand the importance of listening seriously to, and providing adequate support for, those who disclose suicidal feelings, plans and ideas.

The psychological autopsy technique could, therefore, be an important tool in the study of suicide terrorists, though there may be significant pragmatic and cultural barriers to carrying out this type of research. Medical records may be difficult to access and those close to the suicide attacker may be unwilling to be interviewed about the perpetrator (though Hassan (2001) demonstrated that those in militant camps are willing to be interviewed about suicide terrorists)). This then, is an approach that may yield important insights into the mind of the suicide terrorist and help to identify those young people at risk of becoming indoctrinated into acting as suicide attackers. One researcher has starting the ball rolling in this respect by researching, in some depth, the case of Mohammed Ata (Meloy, 2004). This research represents an important step in the right direction though future studies would need to investigate a number of cases and compare them with a suitable control group (eg. non-suicidal terrorists or another group who had died by violent means). Fields et al. (2005) used

what they term post-mortem interviews of a small group of Palestinian suicide terrorists which involved interviews with families and friends of suicide terrorists, and they also recruited a control group of males roughly the same age and background as the terrorists.

Methodologically robust empirical studies of suicide terrorism are lacking and the lack of attention paid to suicide terrorism in the academic literature has been noted by others (Moghadam, 2003). Victoroff (2005) has suggested that future research may highlight the crucial and potentially modifiable social, and psychological factors that contribute to the development of the 'terrorist mind set'. Robust, theory-driven empirical studies are now desperately needed and must be developed in methodologically sound ways. Those wishing to adopt the psychological autopsy method would do well to adopt the recommendations of Hawton et al., (1998).

The results of this review strongly suggest that suicide terrorists are not truly suicidal and that attempting to find commonalities between suicide terrorists and others who die by suicide is likely to be an unhelpful path for any discipline wishing to further understanding of suicidal behaviour to follow. Equating the actions and motivations of suicide terrorists with those of other suicides perhaps does something of a disservice to those individuals who die quietly, alone, and with no murderous intent. This is not to say that we should not try to understand the motivations and the psychological, social and psychiatric factors associated with suicide terrorism. Indeed as I have noted this research is now urgently needed and some of the methods used by suicide researchers, such as the psychological autopsy, will prove extremely valuable in furthering our understanding of suicide terrorism.

References

Abdel-Khalek, A. (2004). Neither altruistic suicide, nor terrorism but martyrdom: A Muslim perspective. *Archives of Suicide Research,* 8, 99-113.

Apter, A., Brown, S., Korn, M., & van Praag, H. M. (1990). Serotonin and dysregulation of aggression. In S.Brown & H.M.van Praag (Eds.), *Serotonin in psychiatry.* New York: Bruner Mazel.

Arsenault-Lapierre, G., Kim, C., & Turecki, G. (2004). Psychiatric diagnoses in 3275 suicides: a meta-analysis. *BMC Psychiatry, 4, (37)* 1-11.

Atran, S. (2003). Genesis of suicide terrorism. *Science*, 299, 1534-1539.

Bancroft, J., Hawton, K., Simkin, S., Kingston, B., Cumming, C., & Whitwell, D. (1979). The reasons people give for taking overdoses. *British Journal of Medical Psychology,* 52, 353-365.

Baron, R. S., (2000). Arousal, capacity and intense indoctrination. *Personality and Social Psychology Review,* 4(3), 238-254.

Barraclough, B. & Harris, C. (2002). Suicide preceded by murder: the epidemiology of homicide-suicide in England and Wales 1988-92. *Psychological Medicine,* 32, 577-584.

Beck, A. T. (2002). Prisoners of hate. *Behaviour Research and Therapy,* 40, 209-216.

Berman, A.L. (1979). Dyadic death: Murder-Suicide. *Suicide and Life-Threatening Behavior,* 9(1), 15- 23.

Bertolote, J. M., Fleischmann, A., & Wasserman, D. (2005). Suicide and mental disorders: do we know enough? *British Journal of Psychiatry,* 183, 382-383.

Bond, M. (2004). The making of a suicide bomber. *New Scientist, 182,* 34-37.

Burdman, D. (2003). Education, indoctrination and incitement: Palestinian children on their way to martyrdom. *Terrorism and Political Violence*, 15, 96-123.

Cavanagh, J. T. O., Carson, A. J., Sharpe, M., & Lawrie, S. M. (2003). Psychological autopsy studies of suicide: a systematic review. *Psychological Medicine,* 33, 395-405.

Chan, C. Y., Beh, S. L., & Broadhust, R. G. (2003). Homicide-suicide in Hong Kong, 1989-1998. *Forensic Science International,* 137, 165-171.

Colvard, K. (2002). Commentary: The psychology of terrorists. *BMJ*, 324, 359.

Costa, P. & McRae, R. (2002). *NEO PI-R professional manual*. Lutz, Fl.:

Psychological Assessment Resources.

Counts, D. A. (1987). Female suicide and wife abuse: A cross-cultural perspective.

Suicide and Life-Threatening-Behavior, 17, 194-204.

Dale, S. F. (1988). Religious suicide in Islamic Asia: Anticolonial terrorism in India,

Indonesia, and the Philippines. *Journal of Conflict Resolution,* 32, 37-59.

Dervic, K., Oquendo, M. A., Grunebaum, M. F., Ellis, S., Burke, A. K., & Mann, J. J.

(2004). Religious affiliation and suicide attempt. *American Journal of Psychiatry,* 161, 2303-

2308.

Ergil, D. (2001). Suicide terrorism in Turkey: The workers' party of Kurdistan. In

Countering suicide terrorism: An international conference. (pp. 105-128). The International

Policy Institute for Counter-Terrorism. The Interdisciplinary Center Herzliya.

Fields, R. M., Elbedour, S., & Hein, A. F. (2002). The Palestinian suicide bomber. In

C. E. Stout (Ed.), *The Psychology of Terrorism: Clinical Aspects and Responses* (pp. 193-

223). Westport, CT.: Prager Publishers.

Gordon, H. (2002). The 'suicide' bomber: is it a psychiatric phenomenon? *Psychiatric*

Bulletin, 26, 285-287.

Green, D.P, & Seher, R.L. (2003). What role does prejudice play in ethnic conflict?

*Annual Review of Political Science,*6, 509-31.

Hassan, N. (2001, November 19). An arsenal of believers: Talking to the "human

bombs". *New Yorker*.

Haw, C., Hawton, K., Houston, K, &. Townsend, E. (2001). Psychiatric and

personality disorders in deliberate self-harm patients. *British Journal of Psychiatry*; 178**:** 48-

54.

Hawton, K., Appleby, L., Platt, S., Foster, T., Cooper, J., Malmberg, A. et al. (1998). The psychological autopsy approach to studying suicide: a review of methodological issues. *Journal of Affective Disorders, 50, 269-276.*

Hawton, K. & van Heeringen, K. (2000). Future perspectives. In K. Hawton & K. van Heeringen (Eds.), *The international handbook of suicide and attempted suicide.* Chichester.: John Wiley and Sons Ltd.

Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. *Annual Review of Psychology, 53, 575-604.*

Houston, K., Hawton, K., & Shepperd, R. (2001). Suicide in young people aged 15-24: a psychological autopsy study. *Journal of Affective Disorders, 63, 159-170.*

Israeli, R. (1997). Islamikaze and their significance. *Terrorism and Political Violence, 9, 96-121.*

Kimhi, S. & Even, S. (2004). Who are the Palestinian suicide bombers? *Terrorism and Political Violence, 16, 815-840.*

Kushner, H. W. (1996). Suicide bombers: business as usual. *Studies in Conflict and Terrorism, 19, 329-337.*

Lachkar, J. (2002). The psychological make-up of a suicide bomber. *Journal of Psychohistory, 29, 349-367.*

Lamberg, L. (1997). Psychiatrist explores apocalyptic violence in Heaven's Gate and Alum Shinrikyo cults. *JAMA*, 278, 191-193.

Leenaars, A. (1996). Suicide: A multidimensional malaise. *Suicide and Life-Threatening Behavior, 26, 221-236.*

Leenaars, A. & Wenckstern, S. (2004). Altruistic suicides: Are they the same or different from other suicides? *Archives of Suicide Research, 8, 131-136.*

Lerner, J. S., Gonzalez, R. M., Small, D. A., & Fischhoff, B. (2003). Effects of fear and anger on perceived risks of terrorism: A national field experiment. *Psychological Science, 14,* 144-150.

Lonnqvist, J. K. (2000). Psychiatric aspects of suicidal behaviour: Depression. In K. Hawton & K. van Heeringen (Eds.), *The international handbook of suicide and attempted suicide* (pp. 107-120). Chichester: John Wiley and Sons Ltd.

Mann, J. J., Waternaux, C., Haas, G. L., & Malone, K. M. (1999). Toward a clinical model of suicidal behaviour in psychiatric patients. *American Journal of Psychiatry, 156,* 181-189.

Marzuk, P. M., Tardiff, K., & Hirsch, C. S. (1992). The epidemiology of murder-suicide. *JAMA*, 267, 3179-3183.

Meloy, J. R. (2004). Indirect personality assessment of the violent true believer. *Journal of Personality Assessment, 82,* 138-146.

Meng, L. (2002). Rebellion and revenge: the meaning of suicide in rural China. *International Journal of Social Welfare, 11,* 300-309.

Merari, A. (1998). The readiness to kill and die: Suicidal terrorism in the Middle East. In W. Reich (Ed.), *Origins of terrorism: Psychologies, ideologies, theologies, states of mind.* (pp. 192-207). Washington, D.C.: Woodrow Wilson Center Press.

Merari, A. (2005). Suicide Terrorism. In R. I.Yufit & D. Lester (Eds.), *Assessment, treatment and prevention of suicidal behaviour.* New York: John Wiley & Sons.

Michel, K. (2000). Suicide prevention and primary care. In K. Hawton & K. van Heeringen (Eds.), *The international handbook of suicide and attempted suicide.* (Chichester: John Wiley and Sons Ltd.

Milgram, S. (1974). *Obedience to authority.* New York: Harper Row.

Moghadam, A. (2003). Palestinian suicide terrorism in the second intifada: motivations and organizational aspects. *Studies in Conflict and Terrorism,* 26, 65-92.

National Statistics (2005). *Suicides, England and Wales, 200-2003.* National Statistics Website release, 10th March 2005. http://www.statistics.gov.uk./downloads/theme_health/suicides_2000_2003.xls.

Niebuhr, R. (1960). *Moral man and immoral society.* New York: Scribner.

Nonnemaker, J. M., McNeely, C. A., & Blum, W. R. (2003). Public and private domains of religiosity and adolescent health risk behaviors: evidence from the National Longitudinal Study of Adolescent Health. *Social Science and Medicine,* 57, 2049-2054.

O'Carroll, P. (1993). Suicide causation: pies, paths and pointless polemics. *Suicide and Life-Threatening Behavior* 23, 27-36.

Orbach, I. (2004). Terror Suicide: How Is It Possible? *Archives of Suicide Research*, 8, 115-130.

Pape, R. A. (2003). The strategic logic of suicide terrorism. *American Political Science Review,* 97, 343-361.

Pape, R. A. (2005). Dying to win: The strategic logic of suicide terrorism. Random House, New York.

Park, B. C. B. (2004). Sociopolitical contexts of self-immolations in Vietnam and South Korea. *Archives of Suicide Research*, 8, 81-97.

Pedahzur, A., Perliger, A., & Weinberg, L. (2003). Altruism and fatalism: the characteristics of Palestinian suicide terrorists. *Deviant Behaviour,* 24, 405-423.

Poland, J. M. (2002). Suicide bombers: A global problem. *Humboldt Journal of Social Relations,* 27, 100-135.

Post, J. M., Sprinzak, E., & Denny, L. M. (2003). The terrorists in their own words: Interviews with 35 incarcerated middle eastern terrorists. *Terrorism and Political Violence, 15,* 171-184.

Reed II, A. & Aquino, K. F. (2003). Moral identity and expanding circle of moral regard toward out-groups. *Journal of Personality and Social Psychology,* 84, 1270-1286.

Rosenberger, J. (2003). Discerning the behavior of the suicide bomber: The role of vengeance. *Journal of Religion and Health,* 42, 13-20.

Salib, E. (2003). Suicide terrorism: a case of folie à plusieurs? *British Journal of Psychiatry,* 182, 475-476.

Schbley, A. (2003). Defining religious terrorism: A causal anthropological profile. *Studies in Conflict and Terrorism*, 26, 105-134.

Silke, A. (2003). The psychology of suicidal terrorism. In A. Silke (Ed.), *Terrorists, victims and society: Psychological Perspectives on Terrorism and its consequences.* (pp. 93-108). Chichester, England.: John Wiley and Sons, Ltd.

Spencer, J. S. (2002). The suicide bomber - is it a psychiatric phenomenon? *Psychiatric Bulletin,* 26, 436.

Sprinzak, E. (2000). Rational fanatics. *Foreign Policy,* 120, 66-73.

Stack, S. (2004). Emile Durkheim and altruistic suicide. *Archives of Suicide Research,* 8, 9-22.

Stengel, E. (1964). *Suicide and attempted suicide*. Oxford, England: Penguin Books.

Taylor, M. & Ryan, H. (1988). Fanaticism, political suicide and terrorism. *Terrorism,* 11, 91-111.

Träskman, L., Åsberg, M,., Bertilsson, L., & Sjostrand, L. (1981). Monoamine metabolites in CSF and suicidal behaviour. *Archives of General Psychiatry*, 38, 631-636.

Tzeng, O. C. S. & Jackson, J. W. (1994). Effects of contact, conflict, and social identity on interethnic group hostilities. *International Journal of Intercultural Relations,* 18, 259-276.

Victoroff, J. (2005). The mind of the terrorist: A review and critique of psychological approaches. *Journal of Conflict Resolution,* 49, 3-42.

Volkan, V. (2002). September 11 and societal regression. *Group Analysis,* 35, 456-483.

Williams, J. M. G. (1997). *Suicide and Attempted Suicide*. London: Penguin.

Williams, J. M. G. & Pollock, L. (2000). The psychology of suicidal behaviour. In K. Hawton & K. van Heeringen (Eds.), *The international handbook of suicide and attempted suicide*. Chichester: Wiley.

Table 1   Key empirical reports on suicide terrorism identified in the literature review

Authors/Date	Participants	Data source/methods	Type of publication
Meloy (2004)	N=1. Mohamed Atta. (September 2001 suicide attacker.) Plus data gathered from family and friends.	Case study. Included physical evidence surrounding the act, archival data from public and private records and indirect assessment of personality using the Revised NEO personality assessment [(Costa & McRae, 2002)].	Peer-reviewed journal.
Schbley (2003)	(1) 15 religious terrorists. (2) 341 potential suicide terrorists recruited opportunistically from Hizbullah members attending the parade on the Day of Jerusalem (December 14th 2001).	(1) Data from taped interviews with the 15 religious terrorists were used to design the questionnaire study. (2) Psychometric data from questionnaires handed out to Hizbullah members by members of the author's family serving refreshments at the parade.	Peer-reviewed journal.
Post et al. (2003)	35 incarcerated Middle Eastern terrorists (21 from Islamic Jihad and Hizbullah, 14 secular terrorist from Fatah).	Semi-structured interviews.	Peer-reviewed journal.
Fields et al. (2002)	(1) N>1000 children and adolescents aged 6-16 years from Northern Ireland, Israel, the West Bank, Gaza, Lebanon and South Africa over 25 year period. (2) Families and friends of Palestinian suicide terrorists who carried out their attacks between 1993 and 1996. The terrorists were all male and aged 19-15 years at death. Nine control subjects were selected by asking the families of the dead terrorists to nominate friends possessing a similar background and characteristics to their dead relative. Four family members and two male friends of each suicide terrorists and each control were interviewed	(1) Psychometric data gathered from the children and adolescent on personality and violence (amongst other variables such as the Thematic Apperception Test) were used to develop a protocol for post-mortem interviews. (2) Post-mortem studies of Palestinian suicide terrorists – interviews conducted with families and friends of nine suicide terrorists. Control interviews were carried out with nine friends of the terrorists. Post-mortem evaluation included assessment of personality type, psychological state and life experiences. Measures included Coopersmith's scale of self-esteem and the Achenbach Child Behaviour Checklist.	Book chapter.
Hassan (2001)	Nearly 250 people in militant Palestinian camps in Gaza. Including suicide terrorist volunteers who were unable to complete their mission, families of dead suicide terrorists and the men who trained the terrorists. Interviews were conducted between 1996 and 1999. Participants ranged in age from 18-38 years.	Interviews.	Newspaper.

Table 2. **Summary of the major themes and theoretical issues covered with differences between terrorist suicides and other suicides highlighted**

Theme/Issue	Suicide type	
	Terrorist suicides	Non-terrorist suicides
Religion	Common motivator for suicide terrorism.	Protects against suicide.
Overall goal of act	To create terror.	To die or escape from unbearable situation/feelings.
Expectation of outcome following suicide act	Entrance to a paradise afterlife (not death).	Death likely or probable.
Vengeance	Common motivator for act.	Rare motivator for act.
Murderous intent	Common motivator for act.	Rare motivator for act.
Altruism	May be an atypical variant where the death of others is involved.	Found in some cases of suicide but does not usually involve the death of others in the act.
Psychological characteristics/disorders	Not evident in most but enmeshment with religion/suicide cell may be important.	Evident in most completed suicides (especially depression).
Indoctrination and group processes	Commonly cited motivation.	Rare motivator for suicide but may exist in mass suicides and suicide pacts.
Media reports	May induce copycat attacks and influence recruitment to cells.	May influence copycat suicidal behaviour.