



Kidnapping and hostage-taking: a review of effects, coping and resilience

David A Alexander • Susan Klein

Aberdeen Centre for Trauma Research, The Robert Gordon University, Garthdee Road, Aberdeen AB10 7QG, UK

Correspondence to: David A Alexander. E-mail: d.a.alexander@rgu.ac.uk

DECLARATIONS

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Introduction

Although the history of kidnapping and hostage-taking is a very long one, it is only relatively recently that there has been a systematic attempt to understand the effects, both long-term and short-term, on individuals and their families. This is an important issue for clinical and academic reasons. The advice of mental health professionals is sought with increasing frequency with regard to the strategic management of hostage incidents and the clinical management of those who have been abducted. There is evidence to suggest that how best to help those who have been taken hostage is a sensitive and complex matter, and those who deal with such individuals should be as well informed as possible since such events can have long-term adverse consequences, particularly on young children.

This paper addresses the following:

- (1) the background in terms of the history of this phenomenon, the motives behind it and the authorities' responses thereto;
- (2) the psychological and physical effects of being taken hostage;
- (3) coping and survival strategies;
- (4) issues which require further research.

Background

History

Early texts refer to the kidnapping of Abram's nephew (Lot), Julius Caesar and Richard the Lionheart. In medieval times, knights displayed their noble heritage through heraldic devices in the hope that their higher perceived market value would increase their chances of being kept alive for ransom rather than being killed. In the 17th century, children were stolen from their families for 'export' to the North American colonies as servants and

labourers. (Hence, 'kid' meaning 'child', and 'nap' or 'nab' meaning 'to snatch'.) Press-ganging was a means of ensuring an adequate supply of personnel for the merchant fleet during the 19th century.

Certain high profile events, much due to the efforts of the media, highlighted the psychological impact of kidnapping. For example, one of the earliest was the kidnapping on 1 March 1932 by Bruno Hauptmann, a German carpenter, of Colonel Charles Lindbergh's son for ransom.¹ The suffering of the child's parents, and the difficulties of the police enquiry, were exacerbated by widespread speculation and misinformation, and serial random notes. The mutilated body of the child was found and the perpetrator was executed on 3 April 1936. This event caused public revulsion, and the revision of the authorities' bargaining and investigating methods, particularly by the FBI, and even the suicide of a waitress to the family, who was cleared in the enquiries.

In 1972, the 'Black September' group (an auxiliary faction of the Palestinian Liberation Organisation) took hostage the Israeli wrestling team at the Munich Olympics. The unsuccessful negotiations, and the tragic deaths of the whole team during an abortive rescue effort by the German Border Police, were relayed throughout the world by the international media.² Also, after this tragedy, many international authorities revised their strategies for dealing with hostage incidents and sieges.

Motives for taking hostages

Motives can be divided into 'expressive' (i.e. an effort to voice and/or publicize a grievance or express a frustrated emotion) and 'instrumental' (i.e. to obtain a particular outcome such as ransom).³ In reality it is usually difficult to identify any single motive, particularly when the event is

terrorist-inspired. Material motives (e.g. ransom) may be conveniently masked by alleged religious, political and moral ones. Moreover, ransoms may be used to fund political and religious activities. Also, some insurgency groups sell hostages on to other groups for their own purposes.

The taking of foreign hostages has become a particularly popular *modus operandi* for terrorists (who tend to be well-organized and selective in their 'target' hostages), particularly due to their cynical but generally effective use of extensive media coverage. Also, the frequency of kidnapping of overseas personnel has markedly increased in Afghanistan since the US invasion in 2001. Unfortunately, the death toll among hostages is high in Afghanistan and Iraq. A particularly distasteful feature of hostage-taking in these countries is the video-taped executions of hostages, such as those of Nick Berg (a US businessman) and Ronald Schultz (a US security consultant), and their broadcast by Al Jazeera or Al Arabia: such broadcasts represent, however, a powerful psychological weapon, which, as indicated by Pape,⁴ runs the risk of losing public support and sympathy.

Other areas which have become high-risk ones for hostage-taking are Nigeria and Colombia. Most incidents in the former are carried out by criminal gangs for ransom, such as the Movement for the Emancipation of the Niger Delta – MEND. Ransoms in both countries are often on a modest scale to ensure they can be paid. This strategy is sometimes referred to as 'Express Kidnapping'. The frequency of hostage incidents in Colombia has increased 1600% between 1987 and 2000.⁵ The motives there appear to be largely criminal, for financial gain, rather than political. Sometimes such events are described as 'Economic Extortive Kidnapping'. These events can have demoralizing effects on families, who may lose all faith in supportive agencies and organizations, according to a follow-up study by Navia and Ossa.⁵

Authorities' responses

In the late 19th and early 20th centuries, the prevailing model of dealing with such incidents, particularly in the prisons of the USA, had been the 'Suppression Model' (i.e. the use of overwhelming physical force).⁶ This approach can still

be used successfully as was shown by the interventions of the Special Air Service in response to the Iranian Embassy Siege in 1980 in London. However, such successes are not common, and they require extremely careful planning and execution. Armed response has now generally yielded to the techniques of negotiation and conflict resolution in recognition of the risks that an armed response creates for hostages. Such risks were tragically demonstrated at the 1972 Munich Olympics.² More recently, the catastrophic failures by the Russian authorities to rescue the patrons of the Dubrovka theatre in Moscow in 2002 and the children and staff of the Beslan school in 2004, confirmed how risky armed intervention by the authorities can be. The last two incidents resulted in the deaths of 130 and 334 hostages, respectively.

From a psychological point of view, negotiation 'buys time' to enable:

- hostages, perpetrators and the authorities to 'cool down';
- the authorities to clarify the motives of the perpetrator(s);
- the authorities to gather intelligence;
- the authorities to formulate a rescue strategy (should negotiation fail).

Unfortunately, from the hostages' point of view progress may seem to be very slow, and they commonly wonder why the authorities do not 'do something', including effecting their rescue by force.

Psychological and physical effects of being a hostage

For ethical and practical reasons, particularly if children are involved, the follow-up of hostages on release is difficult.⁷ Thus, the scientific and clinical database is relatively modest. Much reliance is therefore placed on autobiographical and biographical accounts of high profile hostages (e.g. Waite,⁸ Slater,⁹ Keenan¹⁰ and Shaw¹¹).

Psychological effects

In general terms, the psychological impact of being taken hostage is similar to that of being exposed to other trauma, including terrorist incidents and disasters for adults¹² and children.¹³

Typical adult reactions include:

- (1) *Cognitive*: impaired memory and concentration; confusion and disorientation; intrusive thoughts ('flashbacks') and memories; denial (i.e. that the event has happened); hypervigilance and hyperarousal (a state of feeling too aroused, with a profound fear of another incident);
- (2) *Emotional*: shock and numbness; fear and anxiety (but panic is not common);¹⁴ helplessness and hopelessness; dissociation (feeling numb and 'switched off' emotionally); anger (at anybody – perpetrators, themselves and the authorities); anhedonia (loss of pleasure in doing that which was previously pleasurable); depression (a reaction to loss); guilt (e.g. at having survived if others died, and for being taken hostage);
- (3) *Social*: withdrawal; irritability; avoidance (of reminders of the event).

Denial (i.e. a complete or partial failure to acknowledge what has really happened) has often been maligned as a response to extreme stress, but it has survival value (at least in the short term) by allowing the individual a delayed period during which he/she has time to adjust to a painful reality. For example, some hostages in the Moscow theatre siege initially believed that the appearance of the heavily armed Chechnyan rebels was part of the military musical performance.¹⁵

Two extreme reactions have also been noted, namely, 'frozen fright' and 'psychological infantilism'.¹⁶ The former refers to a paralysis of the normal emotional reactivity of the individual, and the latter reaction is characterized by regressed behaviour such as clinging and excessive dependence on the captors.

Extended periods of captivity may also lead to 'learned helplessness'¹⁷ in which individuals come to believe that no matter what they do to improve their circumstances, nothing is effective. This is reminiscent of the automaton-like state reported by concentration camp victims ('walking corpses').¹⁸

Genuine psychopathology has also been noted. A follow-up study of ransom victims in Sardinia found that about 50% suffered from post-traumatic stress disorder (PTSD) and about 30% experienced major depression.¹⁹ The International Classification of Mental and Behavioural Disor-

ders (ICD-10)²⁰ also recognizes the 'Enduring personality change after a catastrophic experience' (F62.0) as a possible chronic outcome after a hostage incident. This condition is characterized by:

- a hostile or mistrustful attitude;
- social withdrawal and estrangement;
- feelings of emptiness or hopelessness;
- a chronic feeling of being 'on edge' as if constantly threatened.

For the diagnosis to be made the symptoms must have endured for at least two years.

The severe and sustained impact on children is demonstrated by several abductions, including that of the children involved in the Chowchilla incident in San Francisco. Terr²¹ confirmed, after that incident (in which 26 children and their driver were abducted and held in a vehicle underground) all the children displayed signs of PTSD, and some symptoms worsened over time (e.g. shame, pessimism and 'death dreams').

Denial, 'frozen fright', 'psychological infantilism' and 'learned helplessness' are not age-specific. Children may also display: school refusal, loss of interest in studies, dependent and regressed behaviour, preoccupation with the event, playing at being the 'rescuer', stubborn and oppositional behaviour, and risk-taking. The impact can be particularly serious if the children have been detained over an extended period and if the incident entailed a breach of trust.²²

Physical effects

Hostages are likely to have to endure, particularly during sustained periods of captivity, an exacerbation of pre-existent physical conditions, such as asthma and diabetes. Also, the detention itself may generate new conditions due to a lack of the basics of healthy living, such as a nutritious diet, warmth, exercise, fresh air and sleep.

At-risk and resilience factors

As yet there is no clear delineation of all factors which conduce to an adverse outcome following being taken hostage. However, there is evidence that women (especially younger women), more than men, are at risk of such an outcome, as are those of low educational level, and those exposed to an extended period of captivity.²³ An extensive

review²⁴ also suggests that the following may contribute to a poorer post-release adjustment: passive-dependent traits; a belief that one's fate is exclusively in the hands of others; and a dogmatic-authoritarian attitude. Among children, younger age and pre-existent family problems,¹⁵ and the loss of education and the need for post-incident medical care²⁵ may also contribute to adjustment problems.

In recent years, there has been a move in the trauma field from a 'pathogenic' model (which emphasizes illness and problems of adjustment) to a 'resilience' model (which emphasizes coping and 'personal growth' through adversity). While there are uncertainties as to how best to define and measure resilience, this perspective offers a more positive and optimistic approach. Certainly, it is worth emphasizing that many survivors do appear to cope over time, particularly if their family and social environment is supportive. Moreover, a number of high profile hostages (e.g. Terry Waite⁸) have demonstrated how they have used their experiences constructively after their release. Adopting a 'resilience' approach to this kind of trauma may also enhance our understanding the best coping strategies for hostages during their captivity, and for the development of better post-incident care management for them.

Coping and survival strategies

Although it is usually regarded as an 'effect' of being taken hostage, the 'Stockholm Syndrome' will be regarded here as a means of coping and surviving since it certainly enables, on many occasions, hostages to deal with extreme and life-threatening circumstances. The term was first coined by criminologist, Nils Bejerot, to describe the unexpected reactions of hostages both during and after an armed bank raid in Sweden in 1973.²⁶ It was noted that, despite being subject to a life-threatening situation by the raiders, the hostages (three women and one man) forged positive relationships with their captors even to the point of helping to finance their defence after their apprehension. Conversely, the hostage-takers began to bond with their captives. This paradoxical reaction has been noted in many other incidents. The 10-year-old girl, Natascha Kampusch, who was held captive for eight years bonded with her abductor to such an extent that, on his suicide immediately

after her escape, she blamed the police for his death and clearly grieved his death.²⁷

It is not clear why some individuals react in this fashion while others do not. Some merely seek to escape. For example, in Georgia, Peter Shaw, a British financial adviser, was detained in freezing underground conditions and regularly beaten. Fearing his imminent execution, he courageously sought escape. Others maintain hostility to their captors and refusal to accede to requests to convert to Islam (e.g. Yvonne Ridley,²⁸ a British journalist held for 11 days by the Taliban). However, certain conditions do increase the likelihood of the Stockholm reaction. These include:

- an extended and emotionally charged environment;
- an adverse environment shared by hostages and hostage-takers (e.g. poor diet and physical discomfort);
- when threats to life are not carried out (e.g. 'mock executions');
- when there has to be a marked dependence by the hostages on the hostage-takers for even the most basic needs;
- when there are opportunities for bonding between captives and their captors in circumstances in which the former have not been 'dehumanized'. (Some hostage-takers aim to dehumanize hostages by hooding them, depriving them of their names, any identifying details and possessions, treating them as 'animals' and changing regularly their guards – as did Saddam Hussein with his 'human shields' in Kuwait.)

The disadvantages of this reaction are that the hostages after the incident may feel guilty and embarrassed about the way they have reacted. It means that the authorities cannot totally rely on hostages for accurate intelligence or expect them to contribute to any escape plan.

Although PTSD and the 'Stockholm Syndrome' reaction both reflect the severity of the experience, the former is more related to the level of physical violence displayed towards the hostage, whereas the latter reaction is correlated with the level of humiliation and deprivation.²¹ For some individuals it may represent their hope for escape or a way of achieving a psychological separation between their previous 'normal' way of life and their new circumstances. The validity of the concept has been

challenged by Namnyak *et al.*,²⁶ and they suggest that its features lack rigorous empirical evaluation, as well as validated diagnostic criteria, but owes much to the bias of personal and media reporting. Others, for example Cantor and Price,²⁹ view this concept through the prism of evolutionary theory in a fashion which casts light on this phenomenon as well as on other unequal power relationships, including 'boy soldiers' and their leaders, abused children and their parents, and cases of complex PTSD.

Other individual methods of coping with extended captivity include: use of distraction (e.g. mental arithmetic, reading and fantasy); regular discipline (e.g. with regard to personal hygiene and exercise); taking one day at a time; and trying to find something positive in the situation (e.g. Terry Waite⁸ began preparing in his mind his autobiography). Jacobsen describes how a group of adolescents, following a skyjacking, viewed their experience initially with a sense of excitement and adventure and were particularly helpful to young mothers with children on the aircraft.³⁰

Issues which require further research

There are extensive but important gaps in the literature. For example, in relation to attachment theory, it is not clear whether children in particular are affected principally by the emotional stimulation or drive reduction, as the Stockholm Syndrome develops. What underpins this bonding, for different individuals in different crises, has yet to be determined. It is also unclear to what extent the apparent motives of the perpetrators influences the bonding between captor and captive (although it can be difficult to identify the true motives of, for example, terrorists who take hostages). We also need to know more about the interaction between terrorists (who characteristically create a 'public' event) and other external agencies, such as the authorities and the media, and the terrorists themselves whose motives, level of determination etc may not be identical.³¹ With regard to psychological interventions, particularly in the case of children, we also lack much clarity.

Discussion

This is a complex and delicate area of research; perpetrators may be inaccessible or unreliable

witnesses, and there is the omnipresent risk of re-traumatizing survivors through rehearsal of deeply disturbing experiences. Our current database is however too narrow to fashion a better understanding of such events and how to devise strategies and associated training to deal with them.

This review is inevitably constrained by word length, and it is confined to articles cast in English. It is not able to address the impact of hostage-taking and kidnapping on the families of the victims or on those, such as therapists and police family liaison officers who have to respond to the psychological aftermath of such incidents. This review has however highlighted key issues relating to the motives underlying crimes of this kind and how individuals cope during them and subsequently react. While survivors of such experiences commonly demonstrate remarkable resilience, there is no doubt that those experiences can produce a legacy of chronic emotional disturbance and compromised relationships.

References

- 1 Gardner LC. *The Case That Never Dies: The Lindbergh Kidnapping*. New Brunswick, NJ: Rutgers University Press; 2004
- 2 Jonas G. *Vengeance: The True Story of an Israeli Counter-Terrorist Team*. New York, NY: Simon & Schuster; 2005
- 3 Lipsedge M. Hostage-taking and domestic sieges. *Psychiat* 2004;**3**:24-6
- 4 Pape RA. *Dying to Win. Why Suicide Terrorists Do It*. London: Gibson Square Books; 2006
- 5 Navia CE, Ossa M. Family functioning, coping and psychological adjustment in victims and their families following kidnapping. *J Trauma Stress* 2003;**16**:107-12
- 6 Needham J. *Neutralization of Prison Hostage Situations*. Huntsville, TX: Sam Houston State University; 1977
- 7 Alexander DA. Hostage taking: effects, coping and adjustment. In: J Brown, E Campbell, (eds) *Cambridge Handbook of Forensic Psychology*. Cambridge: Cambridge University Press (in press)
- 8 Waite T. *Taken on Trust*. London: Hodder & Stoughton; 1993
- 9 Slater S, Lancaster P. *Beyond Fear: My Will to Survive*. Oxford: ISIS Publishing; 1995
- 10 Keenan B. *An Evil Cradling: The Five Year Ordeal of a Hostage*. London: Hutchinson; 1992
- 11 Shaw P. *Hole: Kidnapped in Georgia*. Cardiff: Accent Press; 2006
- 12 Alexander DA. Early mental health intervention after disasters. *Adv Psychiatr Treat* 2005;**11**:12-18
- 13 Williams R. The psychological consequences for children of mass violence, terrorism and disasters. *Int Rev Psychiatr* 2007;**19**:263-77
- 14 Drury J. No need to panic. *The Psychologist* 2004;**17**:118-19
- 15 Speckhard A. Soldiers for God: a study of the suicide terrorists in the Moscow hostage taking siege. In: O

- McTernan, (ed.) *The Roots of Terrorism: Contemporary Trends and Traditional Analysis*. Brussels: NATO Science Series; 2004. p. 1–22
- 16 Symonds M. Victimization and rehabilitative treatment. In: B Eichelman, W Soskis, W Reid, (eds) *Terrorism: Interdisciplinary Perspectives*. Washington, DC: American Psychiatric Association; 1983. p. 69–81
- 17 Seligman MEP. *Helplessness: On Depression, Development, and Death*. San Francisco, CA: Freeman; 1975
- 18 Bettelheim B. *The Informed Heart: Anatomy in a Mass Age*. Glencoe, IL: The Free Press; 1960
- 19 Favaro A, Degortes D, Colombo G, Santonastaso P. The effects of trauma among kidnap victims in Sardinia, Italy. *Psychol Med* 2000;**30**:975–80
- 20 World Health Organization. *The ICD-10 Classification of Mental and Behavioural Disorders*. Geneva: WHO; 1992
- 21 Terr LC. Chowchilla revisited: the effects of psychic trauma four years after a school bus kidnapping. *Am J Psychiatry* 1983;**140**:1543–50
- 22 Agopian MW. The impact on children of abduction by parents. *Child Welfare* 1984;**63**:511–19
- 23 Stöfösel W. Psychological sequelae in hostages and the aftercare. *Dan Med Bull* 1980;**27**:239–41
- 24 Markesteyn T. *The Psychological Impact of Nonsexual Criminal Offences on Victims*. Ottawa: Ministry of the Solicitor General; 1992
- 19 Gill E. *Stolen Children: How and Why Parents Kidnap Their Kids and What To Do About It*. New York, NY: Sea View Books; 1981
- 26 Namnyak M, Tufton N, Szekely R, et al. “Stockholm syndrome”: psychiatric diagnosis or urban myth? *Acta Psychiatr Scand* 2008;**117**:4–11
- 27 Hall A, Leidig M. *Girl in the Cellar. The Natascha Kampusch Story*. London: Hodder & Stoughton; 2006
- 28 Ridley Y. *In the Hands of the Taliban: Her Extraordinary Story*. London: Robson Books; 2003
- 29 Cantor C, Price J. Traumatic entrapment, appeasement, and complex post-traumatic stress disorder: evolutionary perspectives of hostage reactions, domestic abuse and the Stockholm syndrome. *Aust NZ J Psychiatr* 2007;**41**:377–84
- 30 Jacobsen SR. Individual and group responses to confinement in a skyjacked plane. *Am J Orthopsychiatry* 1973;**43**:459–69
- 31 Wilson MA. Toward a model of terrorist behavior in hostage-taking incidents. *J Conflict Res* 2000;**44**:403–24