ARI Research Note 87-02

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PSYCHOLOGICAL APPROACHES TO ORGANIZED AGRESSION

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January 1987

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER ARI Research Note 87-02	2. GOVT ACCESSION NO. A181150
3. RECIPIENT'S CATALOG NUMBER	
4. TITLE (and Subtitle) Psychological Approaches to Organized ~~Terrorism~~ ABRESSION	5. TYPE OF REPORT & PERIOD COVERED Final Report May - August 1985
	6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) S.J. Rachman	8. CONTRACT OR GRANT NUMBER(s) DAJA 45-85-M-0309
9. PERFORMING ORGANIZATION NAME AND ADDRESS Institute of Psychiatry University of London London, SE5 8AF England	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 2Q161102B74F
11. CONTROLLING OFFICE NAME AND ADDRESS ARI Scientific Coordination Office, London USARDSG, Box 65 F.P.O. New York 09510	12. REPORT DATE January 1987
	13. NUMBER OF PAGES 43
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office) U.S. Army Research Institute for the Behavioral and Social Sciences, 5001 Eisenhower Avenue, Alexandria, VA 22333-5600	15. SECURITY CLASS. (of this report) Unclassified
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE - -

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

- -

18. SUPPLEMENTARY NOTES

Michael Kaplan, contracting officer's representative

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Terrorism
Agression
Organized Agression

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

In this research note, the psychological aspects of terrorism are examined, the aspects examined are divided into six categories:
1) psychological analyses of terrorists, 2) the nature, timing, and effects of terrorist acts, 3) the behavior of terrorists, victims, and negotiators during acts of terrorism, 4) the prediction and prevention of terrorist acts, 5) the effects of terrorist acts on their victims, 6) psychological assistance to the victims of terrorism.

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UNCLASSIFIED

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ARI Research Note 87-02

20. Abstract (continued)

Psychologists are already making a small but useful contribution to the assessment of the effects of terrorist acts on victims. They have, moreover, started to develop useful guidelines for assisting victims to recover from the effects of terrorist acts, although as yet little has been learned that adds to our knowledge of terrorists or terrorist groups.

Another topic that has yet to be analyzed is the psychology of negotiators and negotiations. The possibility of making predictions about terrorist acts on the basis of psychological data has not yet been evaluated, either. One thing appears clear, however. Acts of political violence should be separated from non-political acts of criminal violence. The search for psychological profiles that will discriminate between terrorists and non-terrorists will otherwise be fruitless.

As a final topic, practical obstacles to conducting psychological research into terrorism are also considered.

LIST OF CONTENTS

1. SUMMARY - 1
2. INTRODUCTORY NOTE - 3
3. PSYCHOLOGICAL ANALYSES OF TERRORISTS - 4
4. THE NATURE, TIMING & EFFECTS OF ACTS OF TERROR - 8
5. BEHAVIOR DURING ACTS OF TERRORISM - 11
6. CAN ACTS OF TERRORISM BE PREVENTED? - 12
7. THE EFFECTS OF TERRORIST ACTS ON VICTIMS - 14
8. PSYCHOLOGICAL ASSISTANCE FOR VICTIMS - 16
9. PRACTICAL PROPOSALS - 17
10. NOTES ON METHODS OF APPROACH - 26
11. ADDENDUM - 27
12. SELECTED RESEARCH PROPOSALS - 28
13. REFERENCE LIST - 31
14. SELECTED STATISTICS (APPENDIX A) - 34
15. SELECTED BIBLIOGRAPHY (APPENDIX B) - 36

Psychological Approaches to Organized Aggression

Summary

The purpose of this position paper is to consider whether psychologists are in a position to improve our understanding of, and our ability to deal with terrorism and its effects.

The psychological aspects of terrorism are divided into 6 categories, and the potential contributions of psychologists to each category are considered in turn.

The six categories are:

(a) psychological analyses of terrorists

(b) the nature, timing and effects of terrorist acts

(c) the behavior during acts of terrorism of terrorists, victims, and negotiators

(d) the prediction and prevention of acts of terrorism

(e) the effects of such acts on victims

(f) psychological assistance for victims.

The broad conclusions of the present analysis are that psychologists have already made a small but useful contribution to assessing the effects of terrorist acts on victims and have started to develop useful guidelines for assisting such victims to recover from the effects of such acts. Thus far, little has been added to our knowledge or understanding of the nature of terrorists or of groups of terrorists. Although there are many descriptions of the nature and timing of acts of terror, the problem has not been subjected to systematic, professional psychological analysis. Similarly the behavior of terrorists, and of their victims, during the acts of terror has been described fully, but little in the way of systematic psychological analysis of this behavior has been attempted. Furthermore, the psychology of negotiators and negotiations has yet be analysed in a psychological framework.

The possibility of making predictions about acts of terrorism on the basis of psychological data has not been considered. The related question of whether psychologists have anything to offer in the way of prevention of such acts has not been addressed.

On the critical side, it is argued that for purposes of psychological analysis, acts of political terror should be separated from non-political acts of criminal violence. It is also argued that the search for psychological profiles that will discriminate between terrorists and non-terrorists is unlikely to be fruitful.

Specific questions are formulated and some ways of tackling them are considered. The practical obstacles to conducting psychological research of a conventional type into terrorism, are considered.

Introductory Note

The purpose of this paper is to consider what contribution psychologists can make in attempting to cope with terrorism. We receive frequent reminders of the magnitude and the urgency of the problem, as in the recent attempt to destroy the British cabinet, the killing of over 300 marines, and numerous other examples. Acts of terror have become a common and major feature of the contemporary world, and have led Secretary of State Shultz to observe that terrorism is a "a new kind of warfare".

The magnitude of the problem is illustrated by the chronology of events compiled by Mickolus (1980) for the decade 1968-1977. He summarized 3,329 terrorist incidents recorded during that period and was able to identify no fewer than 423 terrorist organizations (see Appendix A).

Terrorism presents a new set of problems for psychologists, as it does for behavioral and other scientists, let alone for the authorities responsible for ensuring security. The opinion set out in this paper is that there is a potential contribution that psychologists can provide, and that the size and seriousness of the problem justifies a search for scientific and any other plausible form of assistance that can be called upon.

(a) Psychological Analyses of Terrorists

The search for a personality type that categorises terrorists is unlikely to be successful, for a number of reasons. In the first place, there is a large variety of terrorist groupings and activities, and the range of people who engage in such acts is very wide. Secondly, any attempt to identify a characteristic personality type assumes a much higher degree of consistency of behavior and personality traits than is observed (e.g. Mischel, 1968, 1977). The concept of clearly discriminable, stable profiles is partially discredited. With the possible exception of a small but distinctive number of people who engage in terrorist acts for personal pathological reasons (see below), it is improbable that the behaviour (and personality) of people who carry out terrorist acts is at other times distinctive and identifiable. To the contrary, it seems probable that terroristic activities are highly determined by the conditions that promote the acts and the particular circumstances in which they take place. So it is, that in certain notable instances, people who have achieved their political ends largely or partly by acts of terrorism have in time become respected political figures and even acknowledged statesmen. One does not have to accept Hannah Arendt's (1979) notion of the so-called "banality of evil", in order to recognize that people who carry out acts of terrorism are at other times capable of giving and receiving affection, engaging in normal friendly social relationships, and so forth. Acts of terrorism are not, per se, indicative of generalized traits of personality. Situational determinants are likely to play a major role here, as in other acts of violence.

There may well be exceptions to these general observations; some terrorist organizations appear to include within their ranks a proportion of psychopathic people (e.g. in a Dutch hostage-taking episode, see Bastiaans, 1982; Hauben, 1983; Ochberg, 1982, and also in the Hanafi siege in Washington, see Miller, 1980). It may even be the case that psychopathic

people are drawn to such organizations precisely because they afford the opportunity for acts of violence. In view of the probability that at least some members of terrorist organizations are psychopathic, psychologists would do well to re-examine the literature on psychopathy (e.g. Hare and Schalling, 1978) in order to be alerted to these behavior patterns and people within terrorist organizations. Such an examination might improve our ability to describe and predict the terrorist acts of a small sub-group of members of terrorist organizations.

Any attempt to describe and analyze the psychological characteristics of people who carry out acts of terrorism must start with a recognition of the complexity of the task. To begin with, most acts of terrorism are carried out by a group of people rather than by a single individual. Even when the particular act is carried out by a single person, most commonly he or she is part of an organized group that provides support before, during and after the specific act is perpetrated. Hence, an adequate description and categorization of a single terrorist must take into account the composition and nature of the group to which he/she belongs. In other words, one would need to analyse the distinctive characteristics of terrorist groups in addition to describing and analysing the individual terrorist. Also, the motives for attacks vary considerably and range from what Laqueur (1977) describes as "sacramental acts" (pg.9), to mercenary attacks, acts of personal vengeance, and so on.

There are of course several different types of terrorist group (see Laqueur's analysis, 1977) and it is more than likely that they differ in their behavioral characteristics. The following classification is only one of several possible schemes, and is put forward mainly to emphasize the complexity of the task facing psychologists who attempt to categorize terrorists and terrorist groups.

(a) One of the most common and prominent types of terrorist group consists of an organization, usually large, that seeks to achieve specific

and specifiable political goals by acts of terrorism. In these organizations the use of terrorism is stated explicitly and is used as a threat until specified political goals, usually some form of political independence, are achieved. These terrorist groups often are linked with legitimate, non-violent, political parties or organizations. Some active and prominent organizations that fit into this class include the IRA, the PLO and the ANC. These organizations and others like them are what might be called political-terrorist groups. They generally have a large membership, a formal structure and they use conventional political tactics for at least part of the time. Groups of this type encompass a wide range of people, including many who in other circumstances might be regarded as leading and respected public figures.

(b) A second type of terrorist group can be called "nihilistic". These tend to be very small in size, rootless, tightly organised and totally clandestine. The members devote themselves totally to their cause and have few outside concerns or activities. (The so-called "lost man" who is "without interests, belongings, personal ties", and whose acts are not carried out for personal gain, fits into this description (see Laqueur, 1977, pg.29)). They generally live together. They have no <u>specific</u> political goals and their aims, when stated, usually are a expression of broad and angry opposition to most existing institutions. Among these groups there is no expectation or intention of achieving political power as such, but rather their aims are to damage people, property and institutions. Examples of these small and compact groups are the Angry Brigade in the U.K., Weathermen in the U.S., the Bader-Meinhoff gang in Germany, and so on. It has been speculated that such terrorists display distinctive personality patterns, in which inflexibility and at least mild paranoia may be present. These possibilities are worthy of consideration.

(c) A third type of terrorist group is that dedicated to violence for reasons of vengeance. A recent example of such group, one which can have

no expectation or intention of achieving political power, is the Armenian Liberation Army which is currently carrying out violent acts of retribution against Turkish representatives in various parts of the world. Seemingly, like the nihilistic groups mentioned above, they tend to be very small, tightly knit groups of people who are dedicated to their chosen task to the exclusion of other activities or interests.

(d) A fourth type of terrorist group, that may combine elements of nihilism and revenge, comprises people whose acts are prompted, or at least approved, by particular governments. Examples from the recent history of terrorist acts include those approved by the government of Libya, the former government of Uganda, and the current government of Iran. The people that take part in terrorist organizations of this kind may well be distinctive from those who participate in activities of the first three types. In extreme examples, people in this category of terrorist group are acting in a semi-official government capacity. In these cases, there is no good reason to suppose that the people who conduct such acts on official instructions differ in any significant way from people of other countries who carry out acts of violence for reasons of state (e.g. security forces of one form or another). No doubt, most countries find the need, on occasion, to use people whose resistance to acts of violence is low.

(e) Lastly we come to that tiny number of people who commit solitary acts of terror, usually for highly personal reasons. It seems probable that a significant proportion of these solitary terrorists suffer from psychiatric disturbances of a recognised kind, particularly paranoia. These terrorists require separate analysis.

Groups

Naturally the nature of the group, its aims, structure and status, will all play a part in determining when and what type of act is planned or executed. The study of the composition and nature of such group is more properly a subject for political scientists and sociologists rather than psychologists (see Laqueur, 1977).

...8

There are good reasons for enquiring into why particular people choose to join organizations that engage in acts of terror. The motivations for joining groups with specific political aims violent or conventional, are complex. It is however, even more difficult to appreciate why that tiny minority of people who join nihilistic terrorist organizations feel compelled to do so. This important question has been the subject of considerable speculation but there is very little in the way of conventional psychological data on which to set up hypotheses or draw conclusions. An improved understanding of why people are attracted to such organizations would be of great interest but would not necessarily place one in a stronger position to prevent the growth and activities of such organizations. It may however enable one to make slightly improved predictions about their probable behavior.

The diversity of groups and of individual terrorists is such that psychological studies should carefully distinguish between the groups, and avoid rapid generalizations from one group to another. It is particularly important to distinguish between political terrorism and non-political criminal terror, in which personal gain is generally the paramount motive. A failure to consider these as separate phenomena can give rise to misunderstandings, such as the exaggerated significance attached to the so-called 'Stockholm syndrome' (see below).

(2) <u>The nature, timing and effects of acts of terrorism</u>

(a) The targets of a terrorist act may be single or multiple, and can be divided into acts against identifiable political figures, those directed indiscriminately at members of the general public, those directed at property, and those acts which are intended to damage both property and people. The choice of target will of course depend on the aims of the terrorist organizations. Among those organizations which are dedicated to acts of revenge, the targets usually are public representatives of the institution or states against which the grievance is held. The targets of

of the political-terrorist organizations vary with changing circumstances, and seemingly are influenced to a large extent by the desire and need for publicity. Political terrorist organizations generally attack both property and people, depending on the specific aim of the moment. The choice of target is unlikely to be determined in a random manner, so that there is the potential for predicting targets on the basis of highly detailed analyses of past events. It may be possible to construct statistical-psychological models of such acts.

Statistical analyses of terrorist targets have been carried out, especially by Mickolus (1983), and his main findings are included as Appendix A. The most likely victims are U.S. citizens, especially diplomats, politicians and businessmen. Between 1968 and 1980 the death rate increased sharply (see also Braungart & Braungart, 1983). The threat to the victims is greater in kidnappings than in seiges (Aston, 1982). However, Mickolus's data appear to be incomplete and seem not to include all the incidents, targets and effects of the thousands of terrorist acts committed in Ulster. Also, the Israeli data (Ayalon, 1983; Zafrir, 1982) are different in that the targets frequently have been children.

One can assume that there are predictable connections between the aims of the moment and the particular methods chosen e.g. bombing, shooting, the taking of hostages, etc. Here again the detailed analysis of past events may provide an improved basis for predicting the choice of method.

In many instances, the timing of the terrorist act can be traced without difficulty to a specific event. Some terrorist attacks are attempts at retaliation for a recent defeat or humiliation. Others are timed in order to influence political meetings, international conferences, Christmas rush periods, and so on. In all, the selection of the target, the adoption of the methods, and the timing of the attack, are presumed to have a predictable pattern. Whether or not detailed analyses of past attacks will provide a basis for accurate prediction is an open question.

...10

The effects of terrorist acts are specific and general. As far as the general effects are concerned, mainly their political impact, psychologists are in no position to offer advice or assistance. However, the effects of terrorist acts on the victims is essentially a psychological matter, and a reasonable amount of progress had been made in studying such effects (e.g. Ayalon, 1983; Bastiaans,1982; Ochberg & Soskis, 1982). This early evidence suggests that the psychological effects are comparable to what have been described as post-traumatic distress disorders, as defined by the Diagnostic and Statistical Manual (III) of the American Psychiatric Association. The characteristic symptoms of these disorders include a re-experiencing of the traumatic event, greatly reduced responsiveness to the external world, and a variety of cognitive and emotional symptoms. Startle reactions, nightmares and disturbed sleep patterns, increased irritability, fear and avoidance, are commonly observed consequences of exposure distress (Fairbank et al. 1981). These post-traumatic stress disorders usually appear soon after the event, can be protracted, and occasionally occur after a delay of six months or more. On the basis of information available so far, the effects of exposure to a terrorist act appear to resemble the effects observed after exposure to trauma (Ayalon, 1983; Miller, 1980), which in turn resemble anxiety disorders (Foy et al.,1984). However, it should be noted that many victims show great resilience and little sign of traumatic stress disorders. Self-confidence and cohesive group support are possible sources of such resistance (Ayalon, 1983).

Given that there is an important similarity between post-traumatic stress disorders and reactions to a terrorist act, psychologists will be in a position to draw on the steadily accumulating information about such disorders (Fairbank et al,1981) when they are obliged to advise and assist the victims of terrorism. The techniques for assisting such victims are referred to below.

...11

(3) Behavior during acts of terrorism

For obvious reasons, it is important to increase our knowledge of the behavior displayed during acts of terrorism by (a) the terrorist, (b) the victims, and where relevant, (c) the negotiators. There are many accounts, mainly by journalists, of the behavior of terrorists, victims and negotiators during and after a particular act of terrorism. These descriptions can be important, and often are vivid and enlightening. However, they do lack the reliability and replicability of information that is collected in a scientifically systematic fashion. From an immediate and practical point of view, the information that is urgently required is what type of behavior on the part of a terrorist is predictive of serious assaults or the killing of victims? By contrast, what types of behavior are predictive of a relatively pacific outcome? Related to this is the question of whether or not the behavior of the terrorist can be modified to any significant degree by the negotiator or by the victims themselves. As far as the behavior of the victims is concerned, we are not yet in a position to postulate that certain kinds of behavior on their part are likely to promote a pacific outcome or the reverse. These are difficult and complex questions, and their successful resolution will be assisted by the methodical collection of comprehensive and dependable information. As a first step one can review the available information, and gradually supplement this by gathering data in a more systematic fashion in the future.

The 'Stockholm syndrome' (see Ochberg & Soskis, 1982), in which the victim develops a positive relationship and a measure of identification with the perpetrator, has been exaggerated, and illustrates the danger of over-generalizing from an unusual, specific criminal episode to acts of political terrorism. There is for example, no suggestion that the Israeli children and their parents who were victims in any of the 15 major terrorist episodes, developed positive feelings towards the perpetrators (Ayalon, 1983).

The behavior of the negotiators in those terrorist acts where the perpetrators are making demands, as in hijacking episodes, can be vital. A considerable amount of useful information has been collected during the past few years and professional, trained negotiators are having at least a degree of success in a proportion of cases (see Aston, 1982; Miller, 1980; Braungart & Braungart, 1983). Detailed psychological analyses of particular incidents, the behavior of negotiator, and the eventual outcome, are likely to be helpful. As before, the supplementation of this information by prospectively collected data that follows a systematic plan, would be most helpful.

In all of these studies of behavior, the expertise of psychologists should be unmatched. Although the question of primary importance is how the behavior of the various participants affects the immediate outcome of the terrorist act, these behavioral data may also be of some importance in assisting the victims after the event. These data may also help to elucidate the motives of the terrorists.

(4) Can acts of terrorism be prevented?

One is inclined to be told of those terrorist acts that succeed in their damaging purpose, and as a result there is a tendency to ignore those acts that were frustrated by the security forces.

Prevention can take several different forms including standard security precautions such as the provision of reinforced buildings, television scanning, security checks of visitors, and so on. The second form of prevention is the collection and use of prior intelligence. The collection and use of high quality intelligence may be the most valuable precautionary step open to the security forces. The collection of the intelligence is the most difficult part of the process but interpretation and the correct use of the information certainly present their problems. Attempts at improving the decisions and judgements that are based on

intelligence information are under way and form the basis of a recent report to ARI (Adelman, Donnell and Phelps, 1984, TC30-27, TC34-3). They argued that the application of recent research findings to decision-making can help to improve the judgemental processes involved in analysing intelligence materials under battlefield conditions. The research suggests that it is possible to improve the skills and judgemental accuracy of intelligence analysts and also the communication of their reasons for such judgements when conveyed to the responsible authority. The general approach to the problem, and the line of argument developed Adelman et al, have direct implications for the interpretation of intelligence material relative to acts of terrorism, and are not confined to the battlefield conditions that form the substance of their initial report.

There is another approach to this problem of prediction in which the steadily accumulated knowledge of psychologists is likely to prove beneficial. During the past decade there have been increasing attempts made to predict dangerous behavior. The most valuable advances had been made in predicting dangerous behavior turned towards oneself i.e. self-injurious behavior and suicidal acts. The risk of suicide is higher for single people, for widow/ers, divorcees, females between 50-54, males between 75-79, physicians, nurses. Patients with a history of hospitalization for depression are at greatly elevated risk, as are schizophrenics and chronic alcoholics (Beck et al., 1971; Victoroff, 1983; Wetzel, 1978). On the basis of the available statistics it is possible to calculate degrees of probable suicide.

The prediction of dangerous criminal behavior, directed towards other people, is proving to be a far more difficult problem to solve. Regrettably, predictions of violent behavior are poor, and a recent WHO study (Harding, 1983) merely confirmed this fact (even psychiatric expertise did not increase predictive success; there was little agreement among the many participating doctors). A full review is given by Monahan (1981), who

made useful suggestions for improvements (see below).

Despite the impediments to progress , advances can be expected and these are likely to have implications for the prediction of acts of terrorism. The concepts involved in predicting violent behavior may be applicable despite the differences between criminal acts of the ordinary type and those of a terrorist nature. The differences include personal vs group motives, and the fact that acts of terror are with few exceptions carried out by groups rather than by individuals. The need to predict dangerous criminal acts conducted by a group of people rather than by a single actor complicates matters, but on the other hand the presence of explicit aims makes the identification of the potential targets easier. In any event, a review of current knowledge on the prediction of dangerous criminal behavior and its relevance for the prediction of terrorist acts is a worthwhile undertaking, even at this early stage. Perhaps of greater importance over the longer term is the developing methodology used by psychologists in their attempts to predict dangerous criminal behavior; in due course the methods can be adopted and modified when attempting to predict dangerous acts of terrorism.

The prediction of dangerous acts by terrorists and terrorist groups can be subdivided into several questions which include the following: who is likely to commit the dangerous act, when is it like to be committed, is there a short-term danger or is it a long-term threat, and so on?

(5) <u>The effect of terrorist acts on the victim</u>

The general, especially the political effects, of acts of terrorism fall outside the scope of psychology. However, the effects of terrorist acts on victims is essentially a psychological problem. As mentioned earlier it begins to appear that there are similarities between the consequences for the individual of acts of terrorism and the more generally observed post-traumatic stress disorders. There is a growing body of

knowledge on the subject of stress disorders, including in the last decade, detailed observations of the effects of natural disasters on civilian populations. It is probable that a full review of current knowledge of traumatic stress disorders would be found to have implications for the effects of terrorist acts on victims. Even at this early stage however it is worth pointing out that people appear to be more resilient than was formerly thought to be the case (Rachman, 1978, 1982). Under wartime conditions, especially where people are repeatedly subjected to stress and dangers, a large majority appear to undergo a process of habituation, and their emotional responses tend to diminish with repeated exposure. In the reports on the effects of exposure to natural disasters however, usually a single circumscribed event of horrific proportions, there is no opportunity for these habituation processes to take effect. In any event, at this stage it appears that single event disasters (and the majority of terrorist acts would fall into this category) are more likely, not less likely, to produce adverse psychological effects than are repeated stresses. Repeated attacks, such as those experienced by border settlers in Israel, seem to produce little or no increments in anxiety. For example, the anxiety scores of 103 Kibbutz children who were subjected to repeated assaults were uniformly low on tests of anxiety (Milgram, 1982, pg.658).

It remains an open question whether or not people can be given assistance in preparing for potential acts of terrorism. Certainly there are groups of people who live with an elevated risk of exposure to acts of terrorism (diplomats, politicans, border settlers), and the development of forms of psychological preparation might be expected, in principle, to give them a small degree of increased protection against such events. Ayalon (1983) reported an incidental finding from a "natural experiment" in which Israeli children who had received training in coping with war-related threats showed far fewer stress reactions to an alarm signal than

did comparable, untrained children. This possibility derives indirect support from research on the value of providing psychological preparation for people who are about to undergo painful and or unpleasant medical procedures (Melamed and Siegel, 1980). Broadly speaking, it has been found that the provision of adequate preparation substantially reduces pain and discomfort before and after the unpleasant procedures (such as surgery etc.).

(6) Psychological assistance for the victims of terrorist acts

A useful start has been made in attempting to provide assistance for the victims of the terrorist acts (Ayalon, 1983; Shultz & Sloan, 1980; Zafrir, 1982). The available data are sparse, but nevertheless persuasive because they fit in well with complementary knowledge about the effects of psychological procedures applied to emotional disorders in which fear and avoidance play a clear part (Rachman, 1978: Rachman and Wilson, 1980). Specific anxiety-reducing techniques such as desensitization, relaxation, therapeutic modelling, are likely to be useful in alleviating fear and avoidance. Among the other techniques that appear to be promising are guided group discussions among victims, guided re-telling by each person of his/her particular experience during the terrorist act, an opportunity to express among fellow victims (under safe and controlled conditions) one's innermost feelings, guilt and so on, connected with the event. There is reason to suppose that these guided and controlled group discussions are of considerable value in reducing the adverse psychological effects of exposure to the act of terrorism, both in the short and the long term. On the other side, an inability or unwillingness to discuss the events may have long-term consequences of an adverse quality.

PRACTICAL PROPOSALS

Many of the concepts introduced in Part One of this paper lend themselves to psychological analysis and investigation; those aspects of the problem that fall into the ambit of political science or sociology are not included.

Before giving consideration to specific proposals, a preliminary note on methodology is necessary. The greatest part of the available information on terrorists and their activities is collected secretly, and access to such information is necessarily confined to a very small number of people who are directly concerned with the problem. While it is possible to plan psychological investigations that do not require full access to this highly confidential information, the resulting studies will necessarily be incomplete and superficial. As secrecy and confidentiality of information is less important in analysing the effects on the victims of an act of terror, and for devising psychological means of assisting such victims, studies of these two phenomena can proceed along reasonably conventional lines, and with minimal delay.

If a good case can be made for extending the psychological analyses to terrorists and their behavior, it should be possible to persuade the authorities responsible for storing the confidential material that a very small number of approved psychologists should be given access to material relating to the nature and conduct of terrorists and terrorist groups. Clearance for scientific investigation of this kind will have to be obtained the highest level if the work is to proceed.

If the obstacles to providing direct access for such psychologists prove to be insuperable, a compromise procedure of the following kind might be adopted. The research psychologists can prepare details of the information that they require and the authorities responsible for the

care of the data can then extract from their records the requested information, after deleting any identifying characteristics that they feel should remain concealed. This manner of proceeding, at arm's length, has its drawbacks, but may in the first instance be more acceptable to the security authorities than permitting direct access to their records.

In the course of developing the proposed psychological investigations it will also become necessary to gather information on a prospective basis. Making the necessary arrangements for assessing the victims of terrorist acts, and for evaluating the therapeutic affects of various forms of assistance, will present practical problems that are in principle, soluble. Obtaining access to terrorists for purposes of assessment, is of course a far more difficult problem. It can be approached in two ways, just as the analysis of existing data can be tackled i.e. the authorities can provide direct access under secure conditions, or the security forces can collect the prescribed information about the terrorists on behalf of the research workers, taking care to remove any identifiable characteristics of the people being studied.

These questions of access to meterial, direct or arm's length, raise matters of considerable sensitivity. In determining the practicability of the proposals for psychological research on this subject, preliminary discussions with the relevant security authorities will be necessary.

Limitation of scope:

Any attempt to encompass the full range of terrorists or terrorist organizations (see Mickolus's list of 423 identifiable units, 1983) is bound to fail. All of the present recommendations for psychological analysis and research assume that such work will be limited to selected units and problems. Obviously this selection will be determined by the degree of threat and its imminence. Certain prominent groups and problems are outstandingly obvious.

(a) Psychological analyses of terrorists and terrorist groups:

Turning to the specific questions for research, a useful starting point would be to collect the existing information on the psychological characteristics of identified terrorists and analyse them within specific terrorist groups, rather than across the board regardless of group membership.

An initial analysis can be carried out using currently available information, but the value of such analyses would be enhanced by access to the records maintained by the security forces. One would need to prepare full demographic descriptions of the terrorists, and as full as possible an account of their entrance into the organization. (Russell & Miller, 1983, have made a start on the demographic analysis (male, single, young predominate), but their case for a terrorist "profile" is not convincing, and does not meet the objections raised earlier in this paper. Moreover, their analysis neglects important groups such as ETA, IRA, etc.) This account would then continue into the nature and duration of their training, their motives for terrorist conduct, including their decision to join the group. In the course of gathering and analysing this considerable amount of data, special attention would be paid to the representation, and the identification of psychopathic people, and the incidence of other types of psychiatric disorder in these groups.

In carrying out the analysis of such data, psychologists would have to contend not only with the usual problem of inter-rater reliability but the much more seriously distorting problem of the reliability of the information that has been or is to be accumulated. The terrorists themselves have every reason for concealing information or providing misleading information, and the value of their evidence would have to be rated against collateral and other forms of confirmatory evidence. In those rare instances where it becomes possible systematically to collect fresh information, corrections for deliberate distortion can be introduced by

two psychological techniques. The terrorists under study can be given psychometric instruments that incorporate standard scales which detect faking or lying. Secondly, the critical interviews can be conducted while the subject is attached to a deceptograph. In this way it may be possible to eliminate from consideration information which is of doubtful reliability.

(b) The nature, timing and effects of acts of terrorism:

Full descriptions of many acts of terrorism have been published (see Bibliography) and therefore are available for analysis. However, the information that finally is published is a distillation from a larger bank of information, parts of which have been denied to the media. A satisfactory analysis of the behavior of terrorists during these acts can be expected to emerge only from a detailed study of the most comprehensive accounts i.e.those which remain in the care of the security forces. The case for carrying out this type of analysis on the records stored by the authorities is strengthened by the fact that such reports will include accounts of terrorist acts that were planned but then prevented, or of those that were aborted at an early stage. Such information is critical and should be included in a satisfactory analysis of the behavior of terrorists and victims during particular acts.

Specific questions that could be addressed include: the selection of the target, the planning of the act, the timing of the act, the participants, the behavior of terrorists immediately prior to, during and after the act. The behavior of the victims during and after the act is also a matter of importance. Particular attention should be paid to the interaction between the behavior of the terrorists and of the victims, with the view to determining, if possible, the safest course to adopt during these incidents. A great deal of importance attaches to the behavior of the negotiators during hostage-taking, and a detailed

analysis of their behavior, plus estimates of the effects of their conduct, would be of value. It might also be possible and desirable to devote some time to examining the techniques for training such negotiators and the efficacy of these training procedures.

In analysing the behavior of terrorists, the victims and negotiators, during the act of terrorism, special attention should be paid to the possibility of formulating a basis for predicting the occurrence of violent behavior. As mentioned earlier, the prediction of dangerous criminal behavior is a recognised subject of psychological study, and an extension to critical incidents of terrorist acts might be worthwhile, providing it is recognised from the beginning that there are major differences between ordinary criminal acts and those carried out by an organised group of terrorists. Regrettably, the techniques that have been developed so far do not yet offer the hope of greatly improved predictions of dangerous behavior (Goldstein and Keller, 1983; Monahan, 1981). However, progress is being made and the emerging methodology can be put to good use in developing methods for improving the predictability of dangerous behavior in terrorist groups. Monahan (1981) has helpfully suggested ways of improving methodology, and the four most important recommendations can be applied to acts of terrorism: predictions must take fully into account base rates of violence, utilize only those items of predictive utility, use all such information, combine person and situation variables.

A start could be made by analysing the existing information about terrorist attacks, subdividing them in to those in which dangerously violent behavior took place and those in which such behavior did not take place. In this way, it might be possible to produce a set of factors, suitably weighted, that improve one's ability to predict the occurrence of dangerously violent behavior (e.g. Kidnapping is more dangerous than a seige, Aston, 1982). The factors which might contribute to the final equation include the following: the number of terrorists concerned, the

type of act, previous acts of violence, the amount and type of weapons involved, the number and type of potential victims, the possibility of the terrorists achieving their stated aims, the possibility of their escaping with freedom, the presence of negotiators, the presence of a trusted mediator, and so on. Hassel's (1982) claim that the most dangerous period for hostages is the first few minutes, among others, can be tested. It is also of interest, and possible value, to note that the majority of hostage-takers have escape plans prepared (Miller, 1980) and that safe conduct is a common and important demand in negotiations (Aston, 1982).

Only after the considerable progress been made in developing a psychological and statistical model of this character, would it be advisable to attempt the application of this method to ongoing acts of terror.

As far as the collection of data in prospective studies is concerned, standardized psychological interviews can be prepared, with the cooperation of survivors of terrorist acts. In this way it will be possible to obtain fresh and full information about the behavior of terrorists, victims and negotiators-and also about the apparent effects of such behavior. Naturally, the conduct of this type of prospective study would require efficient organization and a high degree of flexibility.

(c) The prediction and prevention of terrorist acts:

It was pointed out earlier that the prevention of terrorist acts can take one of two forms. The first type, based on the provision of adequate security measures, falls outside of scope of the present paper. Laqueur (1977, pp.97-100) argues that counter-terrorism is most effectively based on informers and the use of rewards for information. Such information is valuable for preventing acts of terror. Suggestions for psychological contributions to these counter-measures can be offered. The second form of prevention, based on the collection and evaluation of prior

intelligence, has some psychological aspects to it, and these can be exploited for research and applied purposes.

The advances recently made in understanding the psychology of decision-making and the formation judgements (e.g. Tversky and Kahneman, 1974; Nisbett and Ross, 1980; Janis, 1983, contain accounts of recent work on the subject) are relevant. In this research it has been possible to describe with increasing accuracy and detail the processes involved in the reaching decisions and in making judgements. It has also been possible to uncover a range of distorting (and resistant) cognitive biases. Attempts are being made to improve the quality of intellectual judgements made under uncertainty, and as mentioned earlier, the reports of Adelman et al. (1984) are examples of the application of this approach to problems of military intelligence. In principle it should be possible to apply the psychology of decision-making to the evaluation of intelligence material relevant not only to battlefield conditions, as in Adelman's study, but also to potential acts of terrorism. Specifically, the material that was available to the (security) decision-makers in a large number of selected terrorist acts could be collated and then presented to a series of judges in order to determine the manner in which they deal with the task, and their success in reaching the correct or best conclusion. Using this approach, it is an easy step to move on to the improved training of the people who are called upon to make these evaluations of the available intelligence regarding potential acts of terror.

Once progress has been made in determining the factors that go into making accurate judgements of existing material, attempts can then be made to apply these findings to the evaluation of current information about potential acts of terror. This kind of predicting can be planned in a self-correcting fashion and evaluated case by case as the work progresses.

(d) The effects on victims of acts of terrorism:

A methodology that could be adopted in pursuing this work is taken from the growing research on post-traumatic stress disorders (Fairbank et al., 1981). In this research it has been customary to analyse the effects of exposure to trauma into: the immediate effects, the delayed effects, and the prolonged effects. Although these three are related, they are not interchangable. The major effects of exposure to disaster and related threat are a period of psychological numbing, the re-experiencing of the trauma in various forms, and a range of behavioral and emotional symptoms that include sleeplessness, nightmares, trembling, and so on. In addition, it is common for victims to experience intense fear and extensive avoidance behavior that is associated with or results from such fears. These disorders generally are studied along three modalities: subjective, physiological, and behavioral. Although these three systems are loosely connected, they sometimes show independent development and it would be of interest to trace such connections and their independent development, amongst people who have had the unfortunate experience of being exposed to acts of terror. Such information would be helpful in understanding the nature of the emotional reactions to these acts, and practically it would be of some value in planning psychological assistance for such victims.

In broad outline, the victims of terrorist acts would be asked to participate in specially prepared psychological interviews, complete selected psychometric tests and specially constructed behavior tests. They might also complete physiological testing where appropriate. Their systematic accounts of any behavioral changes that emerged after the attack would be helpful. Such behavioral reports would have to be supplemented by data provided by external informants, and in some instances it might be necessary to supplement this information by direct behavioral observation.

The sorts of question that could be tackled include the nature of

such disorders, whether they resemble post-traumatic stress disorders in showing distinct patterns for the immediate effects, prolonged and delayed effects of exposure, and so forth. It would also be helpful to know whether there is a particular pattern of reacting that is associated with specific acts of terror. For example, is it possible to identify different types of psychological reaction to bombing, hijacking, hostage-taking, and so on? We already have reason to suppose that preparation, group cohesiveness & high self-esteem are important moderators of the effects of terrorist acts (Ayalon, 1983).

(e) Psychological assistance for the victims:

As mentioned earlier, a small beginning has been made in developing and evaluating the effects of different forms of assistance provided for the survivors of terrorist acts. The methods that have been developed so far are an amalgam of behavorial therapeutic techniques developed for the management of anxiety disorders, plus a range of counselling techniques that have been found useful in helping the victims of natural disasters, and some cathartic techniques that have been helpful in assisting sufferers from other forms of post-traumatic stress disorder.

The research on psychological help for victims can be staged in two steps. In the first part, attempts can be made to formulate, from existing information, techniques that are plausible and practical to implement. Once such techniques have been tested under pilot conditions and found to be promising, the second stage, that of evaluating the effects of the techniques, can be undertaken.

It will be appreciated that these two steps are complex and unlikely to be accomplished in a short space of time.

Given the probability that we will be faced with continuing or increasing acts of terror, the psychological consequences of these acts will become a subject of growing importance. Therefore it is desirable to begin soon researching into techniques for assisting victims. Bearing in mind the excellent progress that has been made in recent years in the

treatment of anxiety disorders (e.g. Rachman and Wilson, 1980), and the apparent similarities between aspects of such disorders and stress reactions, we can optimistically expect that some of these techniques will be effective in helping the victims of terror. Moreover, there is good reason to expect that viable techniques can be developed from the existing base. The satisfactory evaluation of the effects of the emerging techniques is a time-consuming undertaking, but is not in principle, difficult to accomplish.

(f) Notes on method of approach:

A few observations on the approach and methodology are in order. From the research possibilities set out here, and they are by no means exhaustive, it is obvious that some can be approached with a minimum of delay, but that others cannot seriously be contemplated unless and until satisfactory cooperation is obtained,preferably at a high level, from the responsible authorities and security forces. For some of these projects, access to classified and confidential information will be essential. Access to such information must necessarily be restricted and protected, and methods of providing secure access to selected,small numbers of researchers will need to be agreed.

Furthermore, the international nature of the problem (made even clearer by recent collaboration between European terrorist groups) recommends a considerable degree of international cooperation between security authorities and between research psychologists. Fortunately, reasonably good relations between psychologists from different countries, who share interests in related subjects, already exist, and one can be hopeful of securing the necessary cooperation at the scientific level.

In view of the novel nature of the problems now presented, it is advisable to obtain the consultant services of the small number of research psychologists with special expertise relevant to the problems

that have arisen. Cooperation will have to be obtained within the confines of the needs of security. Such arrangements should not be difficult to achieve, particularly as most of the consultant advice will be on technical matters, rather than on points of details.

Some of the proposed projects will take the form of reviews of existing data, and these can be started with a minimum of delay. It may even be desirable to carry out some of these reviews in the first instance, while exploring the possibility of undertaking some of the more difficult and complex tasks that will require direct or indirect access to confidential material, and those in which prospective data collection will be needed.

Addendum.

1. In keeping with the growing importance of the subject, the scientific literature is accumulating steadily. It is in the interests of ARI to have ready access to the available information and to ensure an up-to-date supply of new information.
2. A meeting of a small group of psychologists should be arranged to consider these and other proposals for research and analysis.
3. Briefings on psychological aspects of terrorism should be offered to ARI staff.

Selected Research Proposals

Arising from the discussion and analysis above, numerous research possibilities emerge.

- What are the demographic characteristics of terrorists?

- What is the nature and duration of their training?

- What are the effects of such training?

- What types, and proportions, of psychopathic people are found in this group, and can they be identified satisfactorily?

- Can psychological/statistical models be constructed that would enable one to make predictions about the nature and timing of terrorist episodes?

- Specifically, how is the target selected, how is the act planned, what determines the timing, who selects the participants, and how is this done?

- What can be discovered about the behavior of terrorists before, during and after the execution of a terrorist act?

- Can their behavior before, during and after the commission of a terrorist act provide a basis for predicting their behavior?

- How do victims behave during terrorist acts (e.g. do they interact with the perpetrators) and what effect does this have on the outcome?

...29

- What influence, if any, does a trained negotiator have on the outcome of a terrorist episode?

- How does the behavior and strategy of the negotiator affect the behavior of the terrorists, and the victims, and what influence does it have on the outcome?

- Is it possible to develop a model for predicting the occurrence of the violent behavior during terrorist acts? How do the following factors contribute to the equation: the number of terrorists involved, the type of act, previous acts of violence, the weapons involved, the number and type of victims, the possibility of the terrorists achieving their stated aims, the possibility of safe conduct, the use of negotiators?

- Can recent advances in the psychology of decision-making be applied to the analysis of intelligence material pertaining to potential acts of terrorism?

- As the first step, can security decision-makers reach accurate conclusions from the material that was available prior to terrorist incidents?

- Can this approach be used as a basis for improving such decision-making and the training of people who are called upon to make these evaluations of the available intelligence regarding potential acts of terror?

- What are the effects of various types of terrorist experience on the victims?

...30

- Specifically, is there particular pattern of reaction that is associated with a specific act of terror, such as bombing, hijacking, hostage-taking and so on?

- Do the reactions to these events resemble the post-traumatic stress disorders that can arise after exposure to stresses such as natural diasters, wartime experiences, and so on?

- Is it possible to formulate, from existing information about the effect of terrorist attacks and from the existing procedures for treating anxiety disorders, one or more techniques that are plausible and practical in helping the victims of terrorism?

- Is it possible to construct a form of preparation and coping skills training that might be of benefit to potential targets of terrorist acts?

- Is it possible to identify the causes of the marked individual differences in reaction to acts of terrorism?

- Given that these influences can be identified, can they be incorporated into preparation exercises provided for potential victims of terrorist act?

- Given the development of plausible "treatment" techniques for assisting the victims of terrorism, is it possible to evaluate the effectiveness of these procedures in practice?

- Can the psychological processes involved in re-adjustment (e.g. emotional processing) be identified, and if so, can they be employed for purposes of rehabilitation?

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APPENDIX A (a)

SELECTED STATISTICS, DRAWN FROM MICKOLUS'S REVIEW (1983)

Table 1. Total No. & Types of Attack, 1968-1980

1. Explosive bombing	2,371	(35%)
2. Threats	1,008	(15%)
3. Incendiaries	753	(11%)
4. Kidnapping	401	(6%)
5. Hijacking	173	(3%)
Total over period =	6,714	

(N.B. These figures do not include IRA, many mid-East incidents, ANC etc. The estimates are below the actual number of events that took place.).

Table 2. Identified groups of terrorists

1. Cross-national	= 6	
2. Latin America	= 140+	
3. Europe	= 120+	(Sweden = 1).
4. Asia	= 50	
5. USA	= 29	(Canada = 2).
6. Africa	= 25	
7. Mid-East	= 70	(Inc. 45 Palestine-related).
Total No.	= 423	

(b)

Table 3. Recorded events, by year, (1968-1977)

(Increasing Deaths, per year, in parentheses)

1968	-	123 (35)
1969	-	179 (64)
1970	-	344 (131)
1971	-	301 (36)
1972	-	450 (157)
1973	-	340 (127)
1974	-	425 (344)
1975	-	342 (276)
1976	-	455 (415)
1977	-	340 (262)
1979	-	N.S.(738)
1980	-	N.S.(642)

Table 4. Nationality of Victims (1968-1980)

1. N. America	-	2,662
2. W. Europe	-	1,386
3. Mid-East	-	1,271
4. Latin America	-	560
5. E. Europe	-	313
6. Asia	-	195
7. Transregional	-	186
8. Sub-Saharan	-	128
9. Oceania	-	13

APPENDIX B

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(Additional to Reference List on page 31)

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3. CIA Publications on Terrorism (available to US Govt. personnel).