

## HOSTAGE AND CRISIS INCIDENTS: AN EVIDENCE-BASED ANALYSIS TO INFORM POLICE NEGOTIATOR TRAINING PROVISION

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### INTRODUCTION

It has been asserted by a number of authorities that hostage taking has a long history and that the resolution of such incidents, as well as sieges and barricades, were typically resolved, until relatively recently, by force (e.g., Alexander and Klein, 2010; Needham, 1977). The last-named coined the expression "The Suppression Model", and it is acknowledged that force has achieved some dramatic and worthwhile successes (e.g., the release of the hostages from the 1980 siege of the Iranian Embassy, London, by the Special Air Service). However, particularly due to the equally well publicised failures to end such events without high levels of fatalities, the use of force has now generally yielded to a negotiation strategy.

Such a strategy also carries with it considerable risks to all parties involved, negotiators, perpetrators, hostages and innocent bystanders. Thus, a successful negotiation strategy is contingent on the availability of highly trained personnel. In the UK, the police provide these specialist negotiators, although intermediaries (e.g., family members of the perpetrators) may be used, and the Scottish Prison Service uses its own negotiating personnel.

For operational effectiveness, therefore, relevant training is *sine qua non*. Relevant training, as emphasised by Menzies (2010), can only be delivered through the recording and provision of valid and reliable data deriving from the operational field. Internationally, there are several extensive databases fed by information from operational incidents. The best known and most influential are the Hostage and Barricade Database System (HOBAS) maintained by the Federal Bureau of Investigation. However, even it has been subject to some trenchant criticism, particularly with regard to the validity and reliability of its data (Lipestsker, 2004).

All Scottish police negotiators are centrally trained on a 12-day National Crisis Negotiator Course run under the aegis of the Scottish Police College. Efforts are made by the Training Sub Group and the Directing Staff of the Course to ensure that the training provided does reflect operational realities. To this end, they call upon information which has been collected from incidents, throughout Scotland, to which negotiators have been deployed. This Scottish database, whilst offering a potentially valuable source of information, has some limitations, particularly with regard to how the data are collected. Moreover, it has never been subject to a rigorous analysis to identify: (i) trends and findings which could be used to inform training and, therefore, practice, and (ii) opportunities for improving the data recording processes and documents.

The establishment of an accurate, convenient and accessible method of data collection defines a very important opportunity for international collaboration and research as well as generating invaluable data to underpin training at the Scottish Police College.

## METHOD

### (i) *The Database*

Permission was gained for the investigators to have access to the Microsoft Access database held by the Police Emergency Planning Department of Strathclyde Police Force, Glasgow. Permission was granted through the Assistant Chief Constable of Strathclyde Police (Chairman of the Negotiator Group of the Association of Chief Police Officers [Scotland]) and the Scottish Negotiator Co-ordinator.

All incidents to which police negotiators were deployed were included in the survey. The period covered was 2005-2008 inclusive. It is argued that that period provides a sufficiently large and representative picture of the deployment of such personnel. Data deriving from kidnaps, prison incidents and international hostage taking events are not included in this database. The raw data derived from the Negotiating Incident Debrief Reports. These were initially paper-based, but are now completed electronically.

### (ii) *Individual records*

Of the 1600 incidents recorded in the above time period, 315 were associated with police negotiator deployment (as opposed to "activated but not deployed").

### (iii) *Data security*

In deference to the sensitive nature of these data, the team were required to maintain high levels of security and confidentiality with regard to data transfer, retrieval, coding, storage and analysis. All personally identifying details of the individuals involved in these incidents were excluded from the data analysis. Moreover, all data will be anonymised prior to any subsequent publications and/or oral presentations.

All records complied with the Data Protection Act (1998).

### (iv) *Analysis*

Under the supervision of Professor Alexander and Police Officers Brown and Menzies, the two research assistants extracted key information from the police records, including the timing of the incidents, the *dramatis personae*, the location, the use of firearms and other weapons, the deployment of Authorised Firearms Officers (AFOs), the involvement of alcohol and other psychotropic substances, and efforts at deliberate self harm.

The data were transferred to SPSS, and were analysed by means of nonparametric methods in view of their non-normality of distribution and/or heterogeneity of variance.

To check for reliability of classification, the Principal Investigator conducted a blind, random cross-check of a sample of 10% of incidents. High concordance was achieved; those few cases in which a discrepancy was noted were resolved by reference to Chief Inspector Brown or Inspector Menzies.

## RESULTS

The following data relate to 315 incidents to which police negotiators were deployed and used operationally.

- *When do such incidents occur and for how long do they last?*

Tables 1 and 2 respectively depict the frequency of incidents per month and per day. With regard to their monthly distribution, they peak in June and they are at their lowest in March. In terms of their daily distribution, there was a tendency for such events to occur more often on Mondays and least often on Fridays.

The mean duration was about 131 minutes with a median of 71 minutes and a mode of 120 minutes. The range was considerable as is revealed by a standard deviation of 273.47.

- *Who creates such incidents?*

Males are by far the most likely perpetrators (83%). Table 3 illustrates the age distribution of those who triggered these incidents. It can be seen that they tend to be in the younger age groups, especially those between 21 and 26 years and between 33 and 38 years.

- *Involvement of weapons (firearms and non firearms)?*

Relatively few incidents involved confirmed or suspected firearms (14%), and non firearm weapons were more commonly used by the perpetrators (43%). The confirmed or suspected involvement of firearms was not related to the age of the perpetrators ( $\chi^2 = 8.459$ ;  $df = 9$ ;  $p = 0.489$ .ns). Nor was the use related to gender ( $\chi^2 = 2.857$ ;  $df = 1$ ;  $p = 0.091$ .ns). Males were, however, significantly more likely to use a non firearm during such incidents ( $\chi^2 = 5.673$ ;  $df = 1$ ;  $p = 0.017$ ).

- *Involvement of alcohol and/or other substances?*

Commonly (64%) these incidents involved individuals who were under or suspected to be under the influence of a psychoactive substance (i.e., alcohol and/or drugs). A chi square analysis confirmed that there was a strong association between age and substance use ( $\chi^2 = 24.972$ ;  $df = 9$ ;  $p = 0.003$ ). The relationship is towards the younger perpetrators being involved with substances in relation to these events. Chi square analysis failed, however, to identify any association between gender and the likelihood of substance taking ( $\chi^2 = 0.510$ ;  $df = 1$ ;  $p = 0.475$ .ns).

- *Where do such incidents occur?*

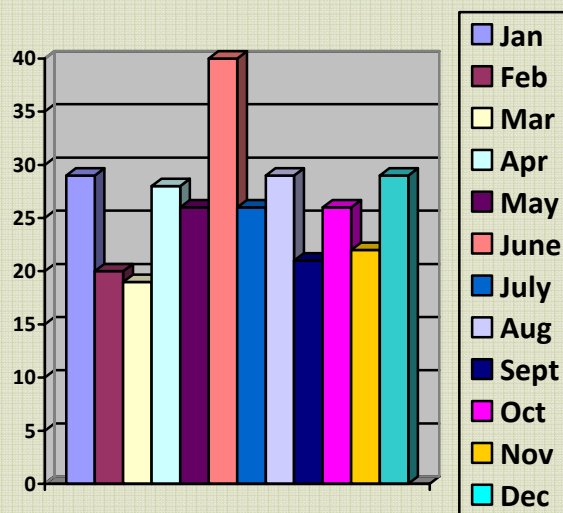
Residential locations were the most frequent sites (62%), and a barricade (i.e., an impediment which prevented police access) was set up on about a quarter (28%) of these incidents. The use of a firearm was much more likely to be involved in a residential setting ( $\chi^2 = 24.519$ ;  $df = 1$ ;  $p = 0.000$ ) as was a non firearm ( $\chi^2 = 36.158$ ;  $df = 1$ ;  $p = 0.000$ ).

- *Was there a hostage or intermediary involved?*

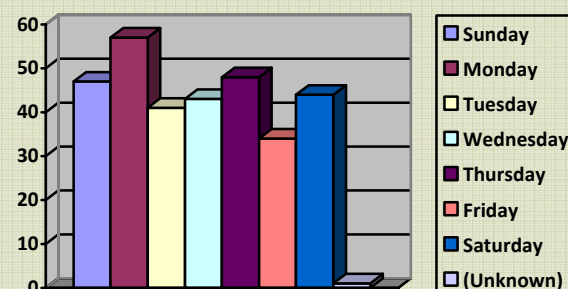
A hostage was involved on only 19 occasions (6%). There was no association between age of the perpetrator and the involvement of a hostage ( $\chi^2 = 12.882$ ;  $df = 9$ ;  $p = 0.168$ .ns). Similarly, there was no association between the gender of the perpetrator and hostage taking ( $\chi^2 = 0.574$ ;  $df = 1$ ;  $p = 0.449$ .ns). Hostage taking was also unrelated to the suspected or confirmed use of a firearm ( $\chi^2 = 0.332$ ;  $df = 1$ ;  $p = 0.547$ .ns) or any other weapon ( $\chi^2 = 3.469$ ;  $df = 1$ ;  $p = 0.063$ .ns).

The involvement of an intermediary to facilitate the negotiation occurred in 83% of these events; the most likely intermediary was a family member, friend or partner in that order.

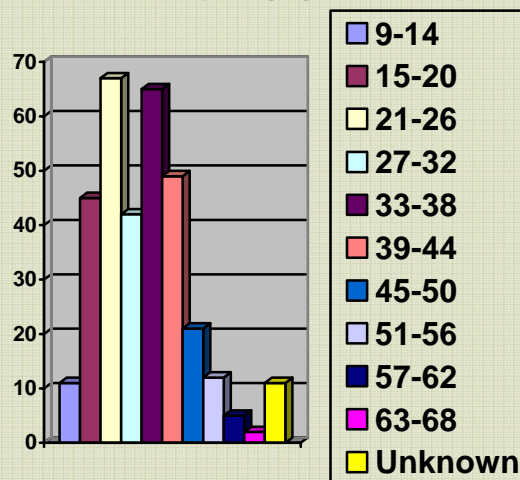
**Table 1 – Total number of incidents per month**



**Table 2 – Total number of incidents per day of week**



**Table 3 – Frequency of age group (all subjects)**

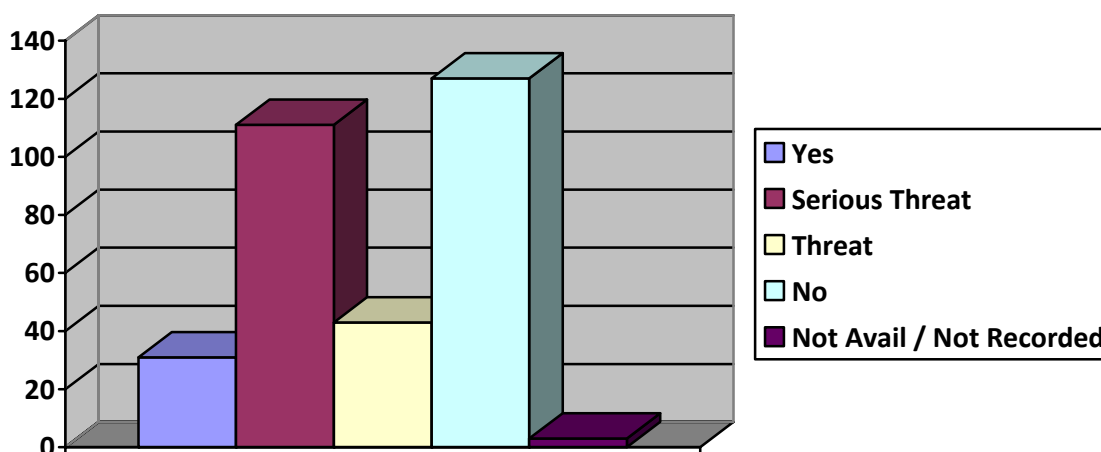


- Was deliberate self harm a feature of the incident and was a mental health professional involved in the event?

Table 4 below displays the level of threat to self posed by the perpetrator. These figures confirm that in over half of the events (59%) there was a threat to the perpetrator's life through the risk of deliberate self harm. Age, however, played no part in this observation ( $\chi^2 = 23.622$ ;  $df = 7$ ;  $p = 0.651$ .ns). Males were much more likely to be involved in acts in which deliberate self harm was a dimension ( $\chi^2 = 12.097$ ;  $df = 3$ ;  $p = 0.007$ ), and incidents in which there was a risk of self harm were more likely to occur in residential settings ( $\chi^2 = 55.674$ ;  $df = 3$ ;  $p = 0.000$ ) but not when substance use was suspected or confirmed ( $\chi^2 = 1.276$ ;  $df = 3$ ;  $p = 0.735$ .ns).

Mental health personnel were only involved on 15 occasions (5%).

**Table 4 - Deliberate attempt at self harm**



## CONCLUSIONS

- The recording procedures and documents for this database need to be upgraded to ensure the availability of more accurate and relevant data.
- The elements constituting the basic training course need to be realigned in accordance with these findings in order that the training reflects real life operational challenges. This is particularly true with regard to such matters as the age and gender of perpetrators; the setting of such incidents; whether or not weapons (firearms and others) are implicated; whether there is a risk to the perpetrators in terms of deliberate self harm; the involvement of psychoactive substances, and whether others are involved (such as intermediaries, mental health professionals, and specialist operational police units).

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