Psychological Consequences of Being Taken Hostage during Peace Operations

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UN Soldiers and Risks during Deployments

Over the past decades Dutch soldiers have frequently been deployed in United Nations peace operations. They were, for example, deployed in the Lebanon, Cambodia and the former Yugoslavia. Their experiences during these operations show that these deployments involved personal risks for the soldiers concerned. Although - in comparison with traditional wars - high rates of deaths and wounded were avoided, many other serious dangers, sometimes even with lifelong after-effects, did occur. Service personnel were exposed to threatening and traumatic experiences in their deployment areas, such as shootings and bombardments, intimidations, the sight of people being injured or killed, and they were involved in situations where they were taken hostage. Events such as these can leave a lasting impression on soldiers and may, as a consequence, lead to a decrease in performance and even to service personnel being sent home prematurely. In the long term, sometimes even after ten or twenty years, service personnel can still be faced with the psychological consequences of stressful and traumatic events that took place during deployment (Willigenburg and Alkemade, 1996).

Every country has its own responsibility for the psychological well-being of the soldiers it deploys. Psychological support during peace operations has for this reason become an absolute requirement. The aim is to maintain optimal deployability of the soldiers concerned, but also to prevent serious psychological damage in the long term after return from deployment, such as post-traumatic stress disorder. Over the past few years the Royal Netherlands Army (RNLA) has developed an integral package of psychological support measures for the soldiers and their home fronts for the periods before, during and after deployment.

The RNLA also conducts research into the psychological consequences of various stressful events in the deployment area and the factors that play a role in this. One such event, with which the RNLA had not been confronted before, is the taking of hostages. Pictures of Dutch and other UN soldiers tied to posts and held by the warring parties were televised and commented on in news reports and newspaper headlines everywhere.

Everyone needs a certain degree of liberty and space to do his job right. Deprivation of liberty can have serious consequences, also for UN soldiers. Taking soldiers hostage, as opposed to taking prisoners of war, is prohibited by international military law. However, precisely because they were neutral and followed by the international media, UN soldiers formed an attractive hostage target for the warring parties. Hostage-taking was used to achieve specific goals, where the hostages served as security. As this was a relatively new phenomenon, the psychological after-effects of hostage taking had not yet been mapped by the RNLA. As a result, its Behavioural Sciences Division started to research this field. In this article this research will be discussed in greater detail.

International Findings

First of all, the relevant literature was researched to produce a list of international findings and recommendations with regard to captivity of soldiers (Flach and Vullinghs, 1996). Research on soldiers being taken hostage appeared to be scarce. Comparisons were therefore made with different forms of captivity, i.e. soldiers being taken prisoner of war, and civilian hostage taking situations like bank robberies and hijacks.

Prisoners of war have been the subject of studies for quite a long time. Every soldier who finds himself in a war situation is confronted with the risk of being taken prisoner of war. This form of captivity during war time is internationally permitted and subject to the rules of the Geneva Convention of 1949. Despite this, being a prisoner of war is seen as one of the most stressful situations to happen to soldiers (Hunter, 1991) and is described as a traumatic experience (Solomon, 1993). The consequences of captivity can be long-lasting, and can even become apparent more than 40 years after the event (Eberly and Engdahl, 1991). Research shows that former prisoners of war - in comparison to other veterans - run an increased risk of developing psychological and physical disorders (Sutker, Allain and Winstead, 1993; Tennant, Goulston and Dent, 1993).Most of the psychological after-effects of captivity are similar, although prisoners of war experience all kinds of captivity situations (Hunter, 1991). The most occurring after-effects are: Post-Traumatic Stress Disorder (PTSD), depressive disorders, sleep disorders, and alcohol and drug abuse (Engdahl, Speed, Eberly and Swartz, 1991; Ursano and Rundell, 1991).

Civilian hostage situations, like hijacks and bank robberies, also fall within the central theme of deprivation of liberty. Kleber and Brom (1992) describe the most stressful aspects of these situations: powerlessness, acute disruption of one's existence, and the presence of a (life-threatening) aggressor. After release, a multitude of symptoms can manifest itself. Bastiaans (1981) states that a hostage taking

causes symptoms that are similar to those caused by other traumatic experiences. Most mentioned after-effects are: PTSD, sleep disorders, anxiety, depression and aggression (Hillman, 1981; Kleber and Brom, 1992; Van der Ploeg and Kleijn, 1989).

Hostage taking of soldiers is comparable with the aforementioned captivity situations. It too can be regarded as a traumatic experience encompassing an abrupt disruption of one's existence, feelings of powerlessness and fear, and extreme discomfort (Kleber and Brom, 1992). Hostage situations, like other forms of captivity, can therefore constitute a serious threat to soldiers carrying out their duties and can have serious after-effects in both the short and long term. Predominantly the same after-effects and psychic disorders can be expected like, for example, post-traumatic stress disorder. Based on these findings it is advisable to aim for prevention of adverse consequences of hostage-taking for the soldiers concerned. Our article will therefore end with our recommendations for effecting prevention methods both prior to, during and after deployment.

Preventive measures within the psychological support system of the RNLA were previously concentrated on the effects of being a prisoner of war, a form of captivity, however, which is characteristic of the large-scale wars of the past. During peace operations, on the other hand, it became clear that hostage situations are much more likely and involve a considerably greater risk for the soldiers. Currently, there is increasing attention for this specific form of captivity. The RNLA has recently begun to develop some measures for the prevention of the after-effects of hostage taking. A structural policy and co-ordination in the field of hostage-taking, however, have not been established yet. The reason being that "hard" figures on the actual effects of hostage-taking on Dutch soldiers deployed in peace operations were not available. Fortunately, this has changed now. This was the reason for a second research project, based on the experiences of Dutch soldiers (Flach and Zijlmans, 1997).

Dutch UN soldiers and Hostage-Taking

For over a year now the Psychotherapy Division of the RNLA has been sending an aftercare questionnaire to deployed service personnel nine months after their return (Willigenburg and Alkemade, 1996). Also, a questionnaire has been sent to all soldiers deployed from 1990 onwards. This questionnaire deals with the effects of deployment on both soldiers and the home front. With the answers to the questions in the questionnaire, it became possible to identify the problems faced by service personnel as well as to assess the need for further support or treatment by clinical psychologists. Service personnel were also asked about the events they experienced in their deployment areas.

The information from the questionnaire thus enables an assessment to be made of the after-effects on service personnel who were held hostage during their deployment. In total, 4,140 soldiers returned the aftercare questionnaire, which is about 50 per cent of the deployed soldiers. Their deployments had taken place somewhere during January 1991 and September 1996. The average age at the time of filling in the questionnaire was 32.4 years. 36% were single, 64% were not. Approximately 40% of the respondents had left active service at the time of filling in the questionnaire.

Our research focused on the following question: Is it necessary to pay more attention to - in the present psychological support process concerning deployments of the RNLA - preventing the negative psychological consequences of being taken hostage? In order to answer this question, a number of issues was examined.

The percentage of soldiers that actually indicated that they had been taken hostage was determined first. Of the soldiers who returned the questionnaire, 326 persons, 8% of the total number of respondents, answered that they had been held hostage, indicating that hostage-taking is by no means an event to be underestimated. Most of the hostage situations took place in the former Yugoslavia.

Soldiers who are taken hostage experience a stressful situation. Abruptly and unexpectedly, they find themselves in a situation of deprivation of liberty, full of threat, uncertainty, unsafety and danger. As a consequence, the experience affects their feelings of safety and trust. Being taken hostage, however, need not be equally traumatic for everyone (Kleber and Brom, 1992). It is therefore important to study *to what extent* being taken hostage had been a *traumatic* experience for the soldiers. In the aftercare questionnaire, this issue is evaluated by looking at the extent to which soldiers who had been held hostage indicated that it had been a *threatening* experience. This yielded the following percentages.

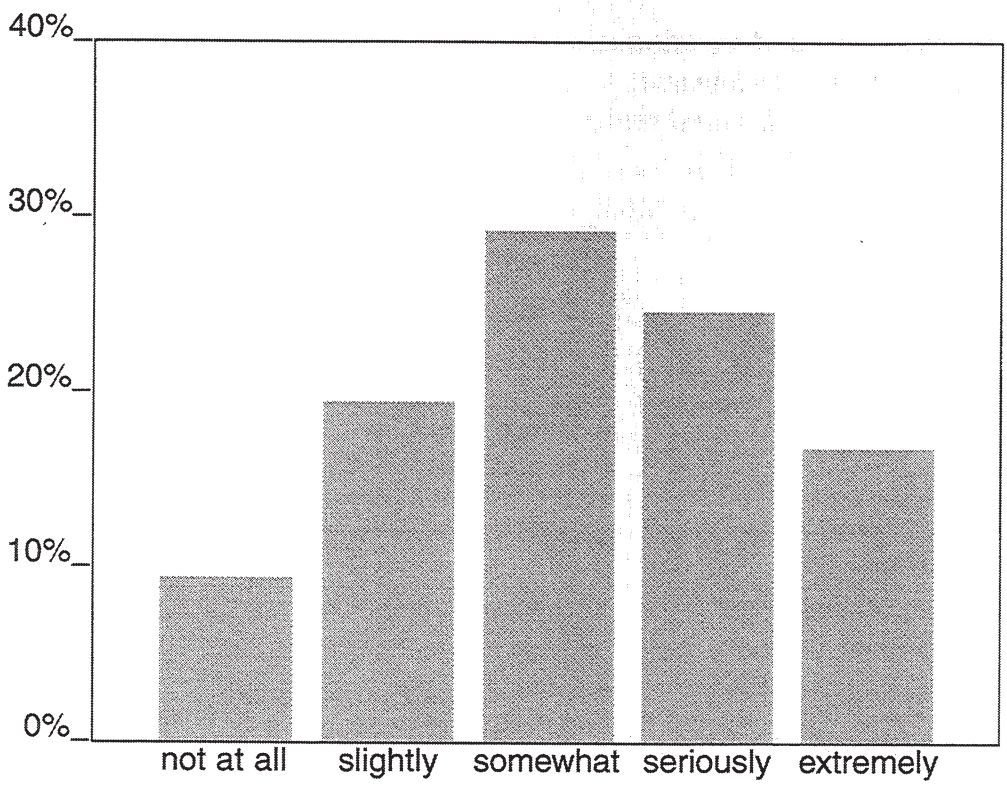

Figure 1: To what extent was being taken hostage a traumatic experience for you?

The results show that forty per cent of the soldiers who had been held hostage indicated that it had been a seriously or extremely threatening experience. At the same time approximately twenty-five per cent of service personnel indicated that it had not been a threatening experience at all or just slightly.

As a consequence of a traumatic and threatening experience, which a hostage taking can be, soldiers may develop symptoms of physical, mental or social disorders. The negative psychological after-effects of traumatic experiences are usually assessed by means of the diagnosis Post-Traumatic Stress Disorder (PTSD). PTSD is characterised by three groups of symptoms. The first group concerns symptoms that refer to *intrusion* of (aspects of) the traumatic experience, like nightmares and suddenly feeling or acting as if the event was happening again. The second group concerns symptoms of *avoidance* of (aspects of) the experience, like avoiding situations or persons that remind you of the experience, or the forgetting of (aspects of) the traumatic experience. The third group of symptoms has to do with physiological *hyperarousal*, like anxiety reactions and hyper-alertness.

In the aftercare questionnaire, PTSD is assessed by means of a 'PTSD Self-Examination List' (Hovens, 1994). Besides this, partial PTSD (i.e. the occurrence of parts of the PTSD diagnosis as opposed to fullblown PTSD), sleep disorders and physical complaints are also assessed in the aftercare questionnaire.

Table 1: Percentages and significance of the kind of problems, nine months or longer after return of deployment, of the soldiers who have been taken hostage and the total group of deployed soldiers.

Kind of Problem	*Soldiers Who Were Taken Hostage*	*Total Number of Deployed Soldiers*	*Statistical Significance*
PTSD	*7.1*	*4.7*	*yes (p=.048)*
Partial PTSD:			
Avoidance	*11.6*	*9.5*	*yes (p=.00)*
Hyperarousal	*23.0*	*17.2*	*yes (p=.00)*
Intrusion	*13.7*	*9.1*	*yes (p=.00)*
Sleeping Problems	*21.0*	*16.1*	*yes (p=.012)*
Physical Complaints	*14.0*	*12.5*	*no (p=.389)*

Based on the criteria formulated in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), 7.1 per cent of the service personnel who were held hostage suffered from PTSD nine months or longer after their return home. Compared to the PTSD per-

centage of the entire group of service personnel, 4.7 per cent, this is a high percentage. This difference will be discussed later. In addition to fully-developed PTSD, statistically significant differences in symptoms of partial PTSD and sleep problems were also found. No statistical differences were found for physical complaints. This makes clear that the group of service personnel who were held hostage differs mainly from the overall group of service personnel as far as psychological complaints are concerned.

The after-effects of being taken hostage are not the same for every soldier. Various factors may play a role in the development of PTSD. In other researches three kinds of factors were distinguished: characteristics of the situation (1), of the person himself or herself (2) and of the environment (3) (Allodi, 1994; Kleber and Brom, 1992). These three characteristics will be discussed below.

1. Characteristics of the Situation

The objectively and subjectively experienced seriousness of a traumatic experience influence the development of PTSD (Boscarino, 1995). In our research the objective information on the seriousness of the hostage situations could not be assessed because of the actual construction of the aftercare questionnaire. It was, however, possible to assess the relationship between the subjectively experienced threat and the development of PTSD. Figure 2 shows this relationship: the more threatening the hostage-taking was felt to be, the more PTSD symptoms are reported.

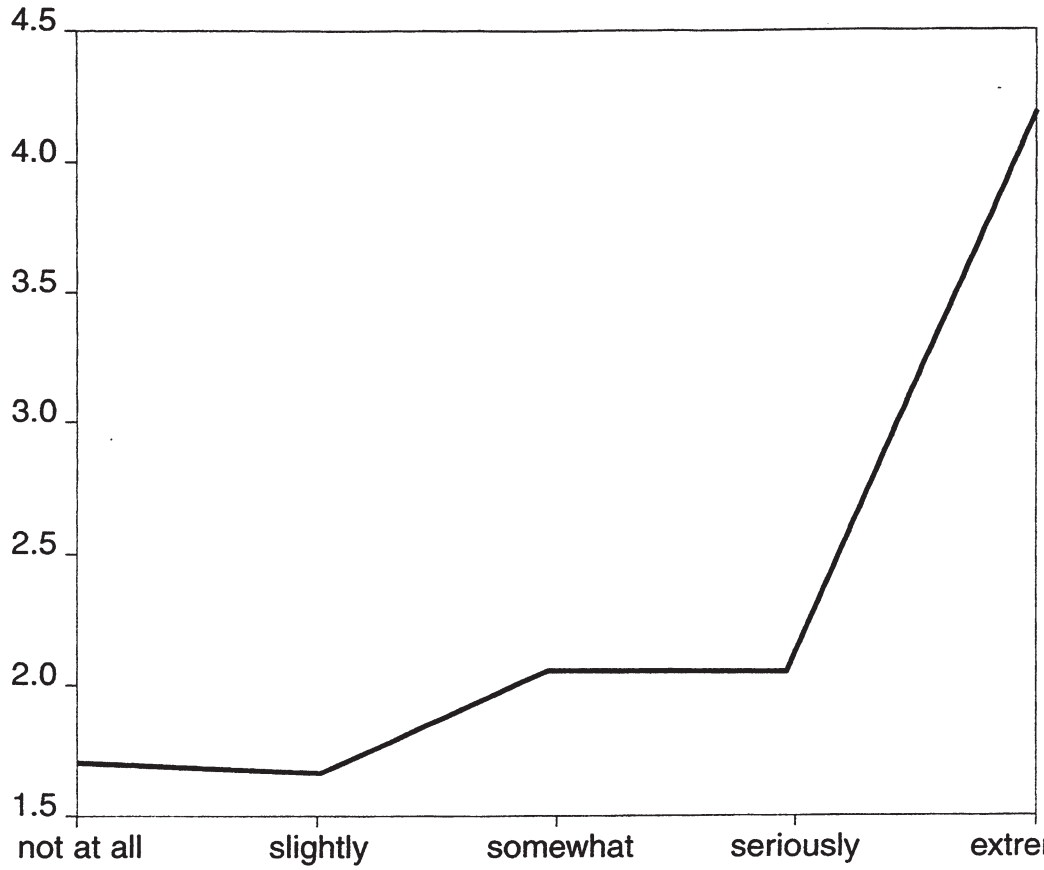

Figure 2: The relationship between the number of PTSD symptoms reported and the level of experienced threat of the hostage-taking situation.

2. Characteristics of the Person

The relationship between age and PTSD was studied as well and a statistical difference was found (p=.00). Young service personnel in particular was found to be susceptible to PTSD. Of the service personnel aged twenty-five and younger who were held hostage, 14.2 per cent was affected by PTSD, compared to 4.1 per cent for those aged between twenty-five and thirty, and 3.6 per cent for those aged thirty or over. Statistical differences were also found for soldiers with a low educational background (p=.04). They have an increased risk of developing PTSD. No statistical differences were found for features relating to the family situation.

3. Characteristics of the Environment

Environmental characteristics - e.g. social support from partner or family, reactions from media and press - can also be important factors as far as the development of PTSD is concerned. These factors could, however, not be assessed in this research, because of the restrictions of the aftercare questionnaire.

Relationship between Hostage-Taking and Other Events in the Deployment Area

The results just mentioned make clear that there is a considerable difference in the number of PTSD cases reported by those who were held hostage (7.1%) and those were not (4.7%). It is therefore tempting to conclude that hostage-taking constitutes a traumatic experience with an increased risk of adverse effects manifesting themselves after deployment. However, this has not been demonstrated satisfactorily, as the two groups may differ in other aspects as well. It is, for example, conceivable that the group of service personnel who were held hostage were deployed in a more dangerous area, and that this also has an influence on the higher PTSD percentage. This was studied in more detail.

In the aftercare questionnaire many possible traumatic events are listed. Every soldier could indicate which events he or she had experienced during deployment. The *number* of traumatic experiences the soldiers reported was therefore first looked at. Those who had been held hostage reported significantly more traumatic experiences in the deployment area from those who were not held hostage: an average of 9.2 events as opposed to an average of 5.0 events respectively (p=.00).

The next step was to study *which* experiences were reported more often by the former hostages. This showed that hostage-taking was seen to be most closely correlated with:

1. colleagues from the soldiers' own units being held hostage (p=.35, 1% sign.);
2. being held at gunpoint (p =.26, 1% sign.);
3. being personally at risk as a result of hostilities, accidents or threats (p=.18, 1% sign.).

When we look in more detail at these experiences, it becomes clear that they are predominantly and directly related to the hostage situation, and often form part of it, i.e. hostage-taking is not an isolated phenomenon, but is often accompanied by other traumatic experiences. You could say that because of the hostage-taking the soldiers concerned run an increased risk of experiencing other traumatic events.

As mentioned before, being held at gunpoint was strongly related to being taken hostage. This seems logical as being held at gunpoint is actually near to the definition of being taken hostage. Its relationship with PTSD was studied more closely. The partial correlations show that being held at gunpoint is a more determining factor in the development of PTSD than hostage-taking itself. It became clear that there is a considerable difference with respect to PTSD between those who were held at gunpoint and those who were not. Being taken hostage but NOT being held at gunpoint did not significantly increase the risk of

PTSD. However, it is important to mention that hostage-taking actually often involves being held at gunpoint: almost 70% of the former hostages were also held at gunpoint (p=.00). Of the group of soldiers who were taken hostage and held at gunpoint, 9.4% developed PTSD.

Conclusions and Recommendations

In the period January 1991 till September 1996, 8.0% of the deployed Dutch service personnel experienced a hostage situation during peace operations. Over forty per cent felt this to be a seriously or extremely threatening event. Of the former hostages 7.1% still have serious coping problems in the form of PTSD nine months or longer after return from deployment. Compared to the percentage of PTSD in the total group of deployed soldiers (4.7%), this is a significant difference.

The more threatening the hostage-taking is felt to be, the higher the risk of PTSD on completion of deployment. Young service personnel confronted with hostage situations are more likely to develop PTSD.

Our research has also shown that experiencing multiple traumatic events in the deployment area leads to a greater chance of developing PTSD. Being taken hostage appears to be directly related to experiencing other traumatic events, such as being held at gunpoint. The results show that being held at gunpoint has an even stronger influence on the development of PTSD than being taken hostage in itself. Being held at gunpoint, however, often forms part of being taken hostage: 70% per cent of the former hostages have also been held at gunpoint.

The results are comparable to the earlier mentioned international findings in the field of captivity. Its findings indicate that it is indeed important to spend more time and attention to preventing the adverse effects of being taken hostage. Hostage taking has occurred regularly during the last 6 years of peace operations, and is an event which increases the risk of serious psychological after-effects and thus decreases the deployability of the soldiers concerned. Co-ordinated and structured prevention methods should therefore be incorporated into the current psychological support system as far as deployment is concerned. This can be done at various moments in time and in different ways (Friedman, Schnurr and McDonagh-Coyle, 1994):

1. Pre-deployment phase (primary prevention)

It is important to prepare service personnel for hostage taking and its impact on their functioning both in the short and long term prior to deployment. Research showed that such a preparation may reduce the resulting adverse psychological consequences. Theory and true-to-life exercises during training are suitable methods. Attention would also have to be paid to the psychological reactions that may occur during

hostage situations, as well as to coping mechanisms, cognitive strategies and relaxation exercises.

2. During deployment (secondary prevention)
The RNLA often cannot do much about hostage-taking during the deployment period itself. It is important therefore to support the home front of the service personnel who are being held hostage and to provide them with information where possible. In this way, the problems for the home front can be reduced to a minimum.

3. Post-deployment phase (tertiary prevention)
Finally, it is important not to leave former hostages to their own devices after their return home. They are to be actively approached by means of follow-up methods and their need for assistance and support is to be assessed in good time. Currently, this is done via psychological debriefings, reintegration interviews and the aftercare questionnaire. In the interest of all service personnel it is advisable to extend and refine this system.

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