

## Reactions and Performance of Swedish Peacekeepers in Life-Threatening Situations

CLAES WALLENIOUS, CURT R. JOHANSSON and GERRY LARSSON

- Claes Wallenius and Gerry Larsson: Department of Leadership and Command & Control, Swedish Defence University, Karlstad, Sweden
- Curt R. Johansson: Department of Psychology, Univa, Lund University, Sweden

### To cite this article:

Wallenius, C., Johansson C.R., & Larsson, G. (2002). Reactions and performance of Swedish peacekeepers in life-threatening situations. *International Peacekeeping*, 9(1), 133-152.

### Claes Wallenius

Swedish Defence University

Dept. of Leadership and Command & Control

**Address:** SE-651 80 Karlstad, Sweden

**Phone:** +46 8 553 42853

**Cellphone:** +46 70 870 74 31

**E-mail:** [claes.wallenius@fhs.mil.se](mailto:claes.wallenius@fhs.mil.se)

Keywords: Swedish Peacekeepers, Stress, Life-threats, Psychological Functioning,  
Peacekeeping Performance

---

This study maps reactions activated in peacekeeping personnel by life-threatening situations and explores how these reactions affect psychological functioning. In-depth interviews were carried out with 30 informants from the Swedish peacekeeping force serving in Bosnia between 1993 and 1995. All participants had experienced shooting incidents or other highly threatening events. Two models were formed. A descriptive model structures the content of the interviews according to the phase and type of situation from which they were mainly reported, as well as whether they were mainly reported by officers or privates. A theoretical model forms the basis for a discussion about the individual and situational factors that affect the specific reactions and how their interaction with role expectations affects performance. The informants were generally satisfied with their performance. Two factors associated with lower performance were either that the life-threatening situation implied loss of control or it demanded complex cognitive activity.

---

Under certain life-threatening conditions, people may react or behave in a manner that decreases their chances of surviving. In other dangerous circumstances they may perform far better than expected. This study addresses how this problem, human functioning during extreme danger, takes shape in a peacekeeping context.

Several lines of research have addressed related problems, specifically concerning the effects of danger, stress, or increased arousal upon human functioning.<sup>1</sup> The effects on work performance and decision-making capacity were studied during the entire twentieth century, often with the use of experimental designs. However, experimental research was, and remains, limited by the ethical dilemma of deliberately exposing people to danger. This has given rise to studies of real-life danger exposure in disaster and combat situations,<sup>2</sup> and studying stress exposure in the peacekeeping context has also attracted significant research.

There is great variability in the type and amount of stress to which peacekeeping soldiers are exposed.<sup>3</sup> Earlier studies on peacekeeping have focused mainly on moderate and chronic stressors, such as monotony, aggressive emotions, unusual climate and cramped

accommodations.<sup>4</sup> However, Scandinavian peacekeeping missions in the 1990s have involved an increased exposure to acute danger, including exposure to fire.<sup>5</sup> Furthermore, existing studies of extreme stress and acute danger in peacekeeping missions mainly deal with long-term psychopathological outcomes.<sup>6</sup> Stress studies focusing on the *immediate* effects within peacekeeping contexts, in terms of psychological function and performance, are lacking.

Even if the adaptation mechanisms in peacekeeping could be expected to be approximately of the same nature as in other danger contexts, traditional combat and disasters being the most analogous, the implications and magnitude of the reactions may differ. Peacekeeping is a different task to traditional combat. Among other things, it lacks the simple ‘friend – enemy’ relationship that occurs in combat situations. The peacekeeping role also requires much emotional and cognitive control, in which the soldier occasionally has to suppress basic behavioural patterns.<sup>7</sup> The role is psychologically complex in that different stressors interact.<sup>8</sup> Accordingly, the purpose of the present study is not solely to map reactions in extreme situations, but also to discuss the implications in the specific peacekeeping context.

In short, the immediate adaptation to danger incidents in a peacekeeping context has not been previously studied. Since it is a new topic, this study explores the mapping of possible reaction outcomes and provides a preliminary theoretical model.

## **Method**

### *Informants*

In-depth interviews were conducted with 30 Swedish informants from the UN peacekeeping force in Bosnia and Herzegovina (BiH) between 1993 and 1995. Those selected had experience from shooting incidents or other highly threatening situations. Selection was made through company commanders and platoon leaders in the concerned battalions, who reported which units and individuals that had been exposed to threatening incidents. In addition, each informant was also questioned on other potential informants’ exposure to threatening incidents. Three selected informants declined to participate in the interview.

All of the informants were male. In Tables 1 and 2 the sample is further described. In relation to the whole of the Swedish battalion’s, the sample’s average age and proportion of regular officers was higher.<sup>9</sup> In general, the informants had little experience of dangerous situations prior to UN service.

TABLE 1  
POSITION, RANK AND PROFESSION OF THE PARTICIPANTS

<b>Position</b>	<b>Rank</b>	<b>Profession</b>	<b><u>N</u></b>
Platoon leaders	Lieutenants or captains	Regular officers	7
Squad leaders	Sergeants	Regular officers (n=2)	7
		Civilians and conscript officers (n=5)	
Privates	(none)	Civilians	16

TABLE 2  
AGE OF PARTICIPANTS

<b>Age</b>	<b><u>N</u></b>
21-25	11
26-30	14
> 31	5

### *Data Collection*

Each interview focused on *one* threatening incident experienced by the informant. In order to choose an incident, the informant was asked which situation during mission he experienced as most threatening. If there was more than one, the choice of situation was guided by the general aim of interviewing several informants who shared the same threatening experience. In most cases (26 interviews), at least two informants were interviewed about the same event. This gave an opportunity to validate specific reports by comparison. However, all interviews were conducted individually.

All interviews took place three to twelve months after the informant's return to Sweden, with an average of six months. The first author, a registered psychologist, conducted the interviews, which normally lasted between 60 and 90 minutes and were recorded on audiotape. Interviews were semi-structured and contained the following content:

- the informants' attitude toward the general risk of being in a war-zone;
- the informants' description of a critical situation he experienced in BiH;

- how the informant and those around him reacted;
- whether the informant perceived any effect on his cognitive capacity, and if so, in what way;
- how the informant perceived his own and his unit's performance;
- how the informant dealt with the experience afterwards.

In addition to these general themes, follow-up questions were adapted during each interview. The importance of building up trust in the interview relationship was vital to this study; the goal was to have a conversation that felt natural and meaningful to the informant.

### *Analysis*

The content of the interviews was analysed by the first author, using the constant comparative method.<sup>10</sup> Categorisation of the interview content was carried out using the following, not strictly sequential, steps.

1. Data was examined through *open coding* in order to identify *meaning-units*. A meaning-unit could be a description of one type of reaction.
2. These codes were sorted into higher-level *categories* or, occasionally, split into lower-level categories. This analysis procedure led to a tree structure with several levels of abstraction, resulting in a total of 420 categories on five levels.
3. The main categories were placed in an overarching *descriptive model*.
4. A *theoretical model* was formulated, with the purpose of discussing what specific factors may affect the outcome.

## **Results - the Descriptive Model**

### *The Situations*

Fourteen different situations were described in the material. They were categorised as follows:

1. *Nonshooting Incidents*: situations that involved threats from weapons but no actual firing. (Number of situations = 5; number of informants = 11).

2. *Shooting Incidents*: situations in which the Swedish unit was exposed to fire without returning it. (Number of situations = 4; number of informants = 10).

3. *Duel Incidents*: situations in which the Swedish unit was exposed to fire and chose to return it. (Number of situations = 5; number of informants = 9).

These situations occurred predominantly when a unit was in a mission area in an armoured vehicle, even if the threat occasionally appeared when the unit was outside the vehicle. Typical tasks involved recognizing and gathering intelligence on positions of belligerent parties and/or supporting the civilian population or other UN units. Threatening situations were perpetuated mainly by exposure to fire or the threat of it, but occasionally also by kidnapping or by the plundering of UN material. The removal of the UN from the area, in order to fight the war without UN monitoring, was described as a motive for belligerent parties to threaten UN troops. Revenge due to earlier return of fire by UN was another motive for the hostility. Furthermore, some shootings seemed to be the result of pure mischief, and on some occasions, the UN unit incidentally happened to be located between fighting parties. In most cases, incidents lasted less than 30 minutes, though some *Nonshooting Incidents* lasted up to several hours. Belligerent shooting came mostly from far away, and UN targets were likewise often far away. This circumstance made it difficult to appraise any number of injured or killed soldiers by UN fire.

### *Individual Reactions and Attitudes*

The analysis is structured according to the model presented below, in which different reactions are related to three core categories:

- The type of situation (*Nonshooting*, *Shooting*, or *Duel*)
- The phase in the course of events (*Preimpact*, *Impact*, or *Postimpact*)
- The personal role in the situation (*Leader* or *Private*)
- Some of the reactions are more general, while most of them are typical for a specific situation, phase, or role.

TABLE 3  
DESCRIPTIVE MODEL OF ACUTE PEACEKEEPING STRESS

	Pre-impact	Impact	Post-impact
Shooting	Personal invulnerability Thrill seeking Worry (L)	Initial delay (L) Alarm reaction Limited fear Self-confidence Personal invulnerability Thrill seeking (P) Concentration Cognitive limitation (L) Collapse of cognitive control (L)	Delayed reactions Revenge desire
Duel	Aggressive tension Personal invulnerability Thrill seeking Worry (L)	Initial delay (L) Alarm reaction Self-confidence Limited fear Personal invulnerability Thrill seeking (P) Concentration Aggressive outlet	Euphoria Administrative worry (L) Delayed reactions
Nonshooting	Personal invulnerability Thrill seeking Worry (L)	Alarm reaction Strong fear Resignation	Delayed reactions

(L) = The reaction was mainly described by platoon/squad leaders; (P) = The reaction was mainly described by privates.

The content of the model shown in Table 3 will be further developed in the following section. Different reaction and performance patterns described in the interviews will be presented chronologically first as *preimpact*, then *impact*, and finally *postimpact*.

#### *The Preimpact Phase*

*Personal invulnerability.* In general, informants did not worry about the possible personal harm of participating in a peacekeeping mission, for example, getting hit by belligerent fire. Rather, the dominating reaction was to deny the risk. ‘*You knew that something could happen. But it won't happen to me. That is the way you think.*’ The informants described this attitude as increasing as the mission progressed. A lack of negative outcome from the dangerous situations almost created a sense of immortality in these particular battalions. Getting used to risks, lack of time for worry, and that fear would get in the way of performing one’s duties properly, were other attitudes mentioned by the informants. However, there were some descriptions of worry about noncombat phenomena, especially traffic accidents. Several informants also described a growing worry towards the end of the mission, since if nothing had happened thus far in the mission, it would be a pity if something were to happen in the

last weeks of the tour.

*Thrill-seeking.* Not only was denial of risk described in several interviews, but also a desire for and almost deliberate seeking of dangerous adventure. '*You actually wanted to be exposed to fire*'. It implied prestige in relation to those who had not experienced the same. Further, adventure seeking was the most dominating motivation for applying to the mission in the first place, something two-thirds of the informants reported. '*And no doubt it is to a large extent the adventure. Those reporting that they only go down there to help people are lying*'. This could be combined with other kinds of motivation, for example, humanitarian reasons or a desire to test or develop one's personal competence. Personal finance, comradeship, military interests, and a general interest for UN missions were also mentioned as motivating forces.

*Worry.* Largely, platoon and squad leaders reported more worry, not for their own sake but rather for their subordinates. Because of his professional competence and knowledge, a military officer might also better identify and understand the risks.

*Aggressive tension.* The informants described a gradual build up of aggressive tension, much of which was due to the UN troops recurrent exposure to provocation concurrently with the inability to intervene.

### *The Impact Phase*

*Initial delay.* Several informants reported an initial delay in reaction to certain dangerous situations. They disclosed that they initially did not want to, or could not accept, the seriousness of the event. The phenomenon was described by the informants as a black out, a mental blocking or shock that could last from seconds up to several minutes. However, this shock did not always prevent them from taking relevant actions in accordance with earlier training. Platoon and squad leaders, who may have had the greatest problems with these initial delay reactions, were the main informants of the problem. It could take several seconds for them to grasp the situation and formulate an order. Mental blocking or problems in grasping the situation were most typical in *Shooting Incidents*.

*Alarm reaction.* Increased heart rate was the most commonly described physiological reaction to dangerous situations, though single cases of dry mouth, giddiness, and perspiration were also reported. However, even decreased heart rate was reported in one case. Alarm reactions, that is reactions with increased arousal, were described with different emotional

content. The informants described it with positive and pleasurable feelings, for example, as being a live wire, activated, or having an adrenaline rush. However, alarm reactions were also described in a negative and unpleasant way, for example, as evoking fright or a feeling of tenseness. Activation of arousal varied during prolonged *Nonshooting Incidents*.

*Limited Fear.* Several informants reported reacting with fear, but it was moderate in most cases. Rather, it was experienced by some as activating. Some informants reported, even in apparent danger, an explicit lack of fear or a lack of any other unpleasant strong emotional reaction. This phenomenon was primarily related to: a feeling of control and safety manifested in the military organisation and equipment; a concentration on one's task; that the incident was perceived as extraordinary, ecstatic or groovy; a feeling of unreality; a deliberate attempt not to believe in the seriousness of the event; incorrect appraisal of the situation; the replacement of fear with aggression; a delayed reaction which came *after* rather than *during* the situation or that someone else reacted quite strongly. In addition, a few informants felt some worry about their lack of reaction or about their bluntness, for example, after witnessing killing or executions of the local population.

*Self-confidence.* Several informants described their experiences with such words as safety, control and self-confidence. *'I had so much control on exactly everyone, and I felt I could show such an authority against those who were troubling us'*. However, such feelings were mainly related to equipment, weapons and support from the unit. Aggressive responses were sometimes described as having served as a form of security.

*Personal invulnerability.* Many informants reported a general feeling of invulnerability that existed even during exposure to fire. The Swedes did occasionally expose themselves to more risks on the battlefield than, for instance, more combat experienced Bosnians. Some informants reported that dangerous situations were experienced as unreal, as acting in a movie or simply as military training.

*Thrill seeking.* The informants described several examples of risky behaviour partaken even during dangerous incidents. The informants gave examples of foolhardy comrades whom in order to watch the detonation of grenades, willingly exposed themselves to the possibility of being hit by splinters. This kind of behaviour could have caused trouble for the whole group, since the injury of one person might have forced the others to expose themselves to danger as well. *'When they withdrew from the vehicle that was hit, he stayed behind and shot with his firearm, emptying magazine after magazine while the others made a*

*withdrawal by turns. It is a big risk to the squad, maybe not that they will be hit, but that he will be and that they will have to drag him*'. In comparison to privates, leaders reported fewer thrills from exposure to fire. One reason for this could be that they generally were older, more informed about the situation, and had a more responsibility.

*Aggressive outlet.* Returning fire was experienced as a release of tension, a feeling of euphoria. Almost all informants who had taken place in *Duel Incidents* reported this experience. *'It was one of the best moments of my life, to have an opportunity to get back and to shoot that much. It may sound a little weird when I listen to myself now, but when I think back on the situation I was in, it was an incredible feeling to shoot back, not to just be on the receiving end all the time.'* This experience of euphoria was related to aggressive tensions described as gradually building up and caused by the UN troops' recurrent exposure to provocation.

The informants also reported that, at times, they had to control their aggression in order to appear calm to the 'enemy'. Disclosing one's feelings could be a disadvantage in, for instance, a negotiation. The informants also described moments when they felt absolutely no aggression due to the lack of control in the situation.

*Concentration.* When asked how *cognitive functioning* was affected, the informants commonly indicated that it was either maintained or even increased in the situations. They reportedly focused on the situation, the threat, the task, and in some cases themselves. Thoughts were limited to the immediate and the present. Some informants described a narrowing of their attention span. Concentration on different scenarios and possible courses of action was a recurrent theme, especially if they were in a pending position.

*Strong Fear.* There were cases of strong reactions of fear. *'There is panic in the back of the armoured vehicle. The panic is probably getting worse, because only one person can see through the binoculars and he is shouting out what he is seeing.... I noticed them lying down, crying, in a foetal position'*. Also, informants reported paralysed reactions and times when fellow soldiers and officers could be out of mental contact. Factors that seemed to be connected to strong fear were: an experienced lack of control over the situation, a feeling of helplessness without any line of action, a feeling of inferiority, a leadership position, and a lack of confidence in superiors. The incidents that activated the strongest reactions of fear were not those with the highest amounts of, or closest, shooting, but were in contrast those

with no shooting at all. In *Shooting Incidents*, those exposed to artillery fire and heavy grenade fire reported more fear than those exposed to direct fire.

*Resignation.* Informants reported several types of emotional states that can be understood as having depressive qualities. Feelings of powerlessness, resignation, and lack of control mostly represented these states. They were often related to a feeling of inferiority or to a feeling of having been deserted. These emotional states were most common in *Nonshooting Incidents* when the threat was diffuse and difficult to control and when the ‘enemy’s’ behaviour seemed unpredictable. Some squad and platoon leaders also reported frustration resulted by the control of higher commanders, with less knowledge of the situation. Resignation was occasionally combined with worry or aggression.

*Cognitive limitation.* There were also descriptions indicating decreased cognitive ability. This almost always concerned platoon and squad leaders. They could describe their thinking as intuitive with little or no planning in advance. They seemed to become mentally fixated on particular objects, in which their thinking can be metaphorically described as ‘taking brief notes’. Leaders were on some occasions described by colleagues as having been too focused on their own perspective, and not necessarily the same perspective as their colleagues. The fact that everyone concentrated on the scene where they were standing could in a more complex situation, with more than one scene, result in frustrated co-operation. Dangerous situations could also activate badly timed routine responses, for example, when an officer suddenly stood up while his unit was under fire. This officer’s explanation for this incident was to see this behaviour as a learned response he had acquired during training with the regiment, in which he had often stood while leading exercises.

*Collapse of cognitive control.* Some leaders reacted so strongly that they were not able to function at all. One leader described his own paralysis due to fright while under exposure to fire, in the following way: ‘It was a “leaders fright”.... I felt that I have right now no control over the situation. At that moment, I felt a terrible mortal fright that totally paralysed me.... Then you lose all logical thinking. You become an animal, flight, you run.’ Further, similar examples were given in which the leader in an hyperactive way gave several orders simultaneously, implying behaviour obviously lacking in relevance to the present threat. Specifically, one leader was described to have given, under exposure of grenade fire, a hundred orders at the same time while simultaneously shouting criticism at individual group members due to their understandable inability to carry out all his orders. Since subordinates

are forced to obey orders given in a military context, the confusion of these platoon and squad leaders created a serious risk for the entire unit.

*Performance.* Defining good performance is not unproblematic, for example, in issues concerning the return of fire. In general, impact *performance* during dangerous situations was reported as good. The informants reported acting within reasonable expectation and had the same opinion about the remaining members of the unit. Cooperation within the unit was described as having functioned well. However, as already concluded, the informants also described problems with performance, due to different stress reactions. Inexperienced gunners failed, for instance, on a few occasions to shoot, due to their reactions in combination with their lack of routine.

### *The Postimpact Phase*

*Delayed reactions.* Many informants, who had not felt any fear during the actual dangerous event, reported that the reaction instead came afterwards on the way back to camp or later in the evening. Others described themselves as feeling tired and exhausted after their initial arousal had diminished.

*Revenge desire.* Those exposed to fire without returning it described a frustration and strong desire for revenge. ‘Yes, what we really wanted was to drive back and use all our ammunition against the place where they were shooting from’. Incidents with experienced performance failure could, on the other hand, result in a bad mood in the group.

*Euphoria.* The informants who had returned fire described their reaction afterwards as euphoric, regardless of the fact that people might have been killed as a result of UN fire. The feeling was even compared to winning a soccer match by one informant. ‘Just as after shooting the decisive goal in the Swedish Championship final... lots of hugs and slaps on the back’. Other informants described the phenomenon as losing their virginity or as a feeling of relief of finally crossing the boundary of retaliation. Feelings of euphoria could manifest themselves in either a desire to remain in the situation or the post-situational desire of returning to it. The informants understood this phenomenon of euphoric feeling to be related to the gradual build up of aggressive tension due to earlier provocation.

*Administrative worry.* After some *Duel Incidents*, the responsible leader reported an ‘administrative worry’ about possible judicial sanctions for violating their UN mandate.

## The Theoretical Model

The presentation of the results thus far has been descriptive, establishing in what situation, phase, and role different reactions were observed. In this section a theoretical model is proposed with the purpose of discussing *what aspects* of the situation, phase, and role best explain the different outcomes. Those factors that on a more general level explain the reaction of the subjects can be either individually or situationally based.

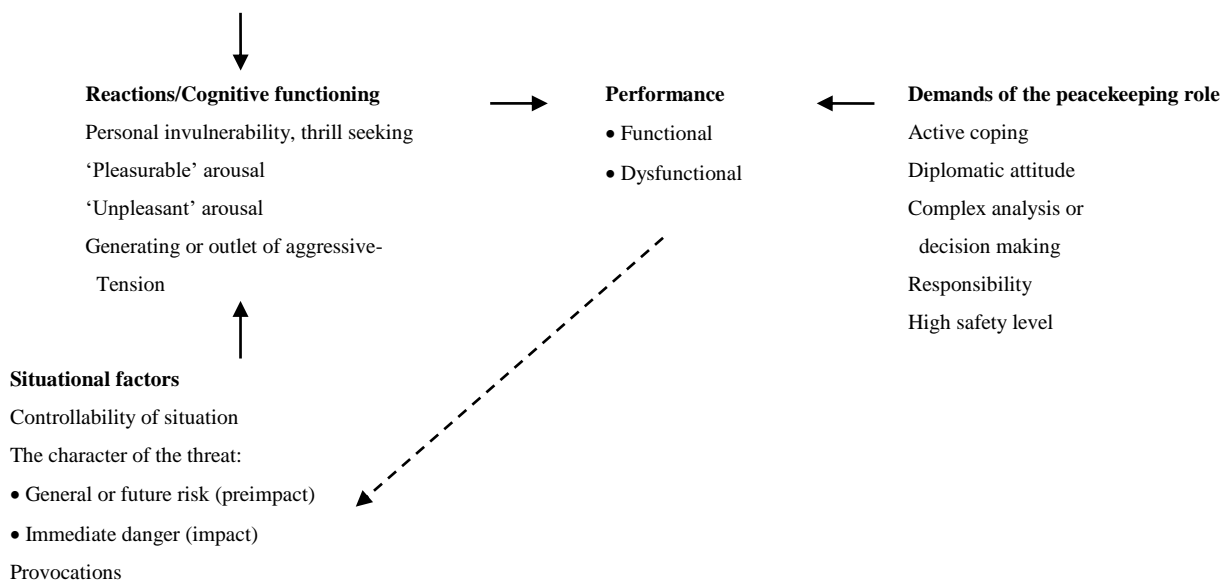
The sample is, as it appears in the interviews, homogenous. Generally, it could be assumed that the impact of situational factors is relatively high in situations related to survival. We do, for instance, not react with arousal in a danger situation because of any personality trait, but because the situation activates a survival response.

Performance is understood as a result of the fit between on one hand the reactions and cognitive functioning and on the other hand the demands of the role, even if there are reactions that may cause maladaptive performance in almost any situation.

FIGURE 1  
THEORETICAL MODEL OF ACUTE PEACEKEEPING STRESS

### Individual factors

Personality, thrill seeking  
Coping-ability  
Confidence in unit and leadership  
Experience of peacekeeping/ danger  
Incidents  
Training



### *Individual factors*

*Personality.* The study suggests that the present sample as a whole have thrill-seeking traits, even if these seem more prominent by those that are young and have less responsibility.

*Coping ability.* It may be assumed that the sample has a generally good coping capacity, even if this has not been measured. To be selected, for instance, they have to have acceptably completed their basic military service. However, the present study was not intended to measure any individual differences in coping capacity.

*Confidence in unit and leadership* is a factor often supposed to facilitate coping with danger. Generally the confidence was high. However, in a few specific incidents, the informant's confidence in leadership was low, which in itself was experienced as a stressor.

*Experience of peacekeeping/ danger incidents.* Most informants had participated in their first mission by the time of the investigation. Most did not have any prior experience with the particular types of incidents described in the interviews.

*Training.* With respect to training, the informants had completed both basic military training and specific peacekeeping training. The regular officers naturally had more military training and experience than privates. The peacekeeping training included various worst-case scenarios, but there is of course no possibility to train every type of danger incident.

### *Situational factors*

*Controllability of the situation.* The present study suggests that one main factor in the prediction of different outcomes is controllability. Controllability of situation implies that hostile parts are under control, that their own peacekeeping force is perceived as superior, or that confidence is felt in relation to the protective measures and protective equipment. Controllability is related to the *type of situation* in the descriptive model. *Duel situations* generally provided a feeling of control and power, while *non-shooting situations* provided a relative lack of these feelings.

*The character of the threat.* We adapt and react differently to general risk than we do to immediate threats. Hence, the *Character of threat* is related to the *Phase* in which the threat occurs. In the *pre-impact* period, the threat is non-immediate and contained in the future, while the threat is immediate during the *impact* stage.

*Provocations.* A third situational circumstance that has psychological implications is

provocations from the civil population and the belligerent parties.

### *Reactions*

*Thrill seeking - personal invulnerability.* Two related psychological processes - thrill-seeking and personal invulnerability - are described in the interviews. Thrill-seeking is a personality trait assumed to be overrepresented within this sample. Personal invulnerability may be an ego-defensive denial mechanism.<sup>11</sup> According to the interviews, the impact of personal invulnerability is generally higher if the threat is diffuse, future, or reinterpretable and lesser if the threat is obvious and immediate. Increased feelings of invulnerability may be associated with overconfidence in the unit and its leadership, while reduced perceptions of invulnerability may be due to earlier traumatic experiences. Accordingly, the invulnerability may be related to both the *character of the threat* and to several *individual factors*.

*'Pleasurable' arousal.* Descriptions of arousal are occasionally combined with positive or pleasurable emotions during the impact phase, such as *limited fear*, *self-confidence*, *personal invulnerability* and *thrill seeking*. On the cognitive level this is often combined with *concentration*. Judgements high in *controllability of the situation* are more related to these pleasurable reactions than lower levels of threat. The fact that the reaction is pleasurable does not mean that it is not functional or adaptive within the situation.

*'Unpleasant' arousal.* Another pertinent set of reactions that are characterised by 'unpleasant arousal' include *strong fear*, *resignation*, *cognitive limitation*, and *collapse of cognitive control*. The most important factors that seem to cause this unpleasant arousal are a sense of inferiority, helplessness, lack of confidence in one's own organisation/equipment, and low *controllability of the situation*.

*Generating or outlet of aggressive tension.* The outlet of aggression experienced when returning fire was described as euphoric. Provocations without possibility for action were described to generate an inner aggressive tension.

### *Demands of the peacekeeping role*

*Active coping.* Danger situations in a peacekeeping context require, almost exclusively, that an active coping strategy be applied. *Personal invulnerability* may free us from permanent worry about potential risks, but conflict with the requirement necessary for active coping within peacekeeping situations and decrease the motivation to prepare for possible threats.

When there is no objective way of influencing the situation, *resignation* can become an adaptive strategy to minimise, in this context, dysfunctional alarm reactions. However, resignation may also, if it implies passivity, conflict with the motivation to carry out the tasks of peacekeeping in an active way. Another non-functional reaction in this context is an *initial delay* before starting any consciously planned action.

*Diplomatic attitude.* A diplomatic attitude is needed in peacekeeping, which may conflict with the *aggressive tension* and desire for *aggressive outlet* that peacekeepers may feel. In the interviews tension was described as controlled; however, there is the possibility that someone may shoot too quickly, too much, too often, or in situations where better alternatives for handling the situation exist. To be exaggeratedly *self-confident* and to seek a sense of security in one's weapon may also imply attitudes that conflict with the peacekeeping aims.

*Complex analysis or decision-making.* As a whole, peacekeeping signifies a more complex situation when compared to traditional warfare. This complexity factor could also be related to *Role* in the descriptive model, since the task of the platoon/squad leaders was more complex, when compared to the privates. Based on interview accounts, high complexity was related to different *cognitive limitations*, such as *initial delay*, *collapse of cognitive control* and *cognitive limitation*. Generally, the risk for maladaptive performance under stress increases with complex role/situation, since arousal will narrow the cognitive space and thus deteriorate complex decision making ability. A moderate *alarm reaction* is by contrast more functional for simple, well-defined tasks.

*Responsibility.* A leading role implies a broader range of responsibility. It is expected that as a leader, one takes responsibility not just for one's own safety, but also for the safety of one's subordinates. Interview data indicated that being a leader was related to a decrease in *thrill-seeking* behaviour, presumably due to their higher average age and to their life experience. Of course, *worrying* about subordinates is also associated with a leading role. Responsibility demands conflict most with *thrill-seeking* and *aggressive tensions*.

*High safety level.* The acceptance of losses in armed conflict has diminished over time. In a peacekeeping operation the acceptance for losses is minimal and the risk taking is expected to be low. *Personal invulnerability* and *thrill-seeking* patterns may conflict with safety. For instance, over-confidence in the protective value of vehicles and other equipment, can be a risk. On the whole, *thrill seeking* may be a prerequisite trait needed in people

selected for these kinds of missions, but this trait may also result in deliberate seeking of danger.

### *Performance*

Performance refers to the extent that an individual contributes to the completion of the task with reasonable costs in accordance with the peacekeeping mandate. Performance can in relation to this be functional or dysfunctional. Performance may also in one way or another affect the situational factors, for instance making the threat less threatening, which implies a new situation.

### **Discussion**

The difficulties in manipulating variables within field research, can somewhat be compensated for by comparisons of reactions in different threatening situations and through analysis of how differences in these situations might affect human reaction. Illusion of invulnerability ('it won't happen to me') has previously been documented in research on risk perception, but has not previously been studied in a peacekeeping context.<sup>12</sup> In this study, the invulnerability experience was probably strengthened by the fact that, despite the frequent dangerous incidents battalions were exposed to, no one was killed and few were injured. Narrowing and focusing of one's attention, when faced with stress, is also a well-documented phenomenon within research on stress and performance.<sup>13</sup> Furthermore, occasional initial shock when facing a trauma, functioning as defensive block in response to overwhelming stimuli, has also previously been documented.<sup>14</sup> Earlier studies of UN missions have reported the existence of aggressive tension and difficulties in coping with it.<sup>15</sup> However, feelings of euphoria when returning fire, as demonstrated in this study, have not been described in earlier studies. This could be due to the social undesirability of this reaction. However, anecdotal descriptions of this reaction by Vietnam veterans do exist, better known as '*the combat high*.'<sup>16</sup> This was considered especially prevalent when the killing was done from medium or long range. Shalit suggests the possibility of soldiers being prone to fire even without necessity, since the release of tension could be manifested in firing one's weapon.<sup>17</sup> The frequently-mentioned hypothesis in military psychology is that soldiers are generally reluctant to shoot and that only a minority actually do, which may contradict the findings presented here. However, this hypothesis has been questioned and needs further study. The credibility

of studies by Marshall during World War II, and of more recent follow up studies in Korea and Vietnam, has seriously been questioned.<sup>18</sup>

Consequently, the reactions mapped in the present peacekeeping study correspond to the general patterns of reaction to danger found in other contexts. It indicates that we as humans have some basic mechanisms of coping with danger applicable across a variety of situations. The unique contribution of this study lies in the specific significance of the reactions in this particular context. Several of the reactions presented in the current study have not been discussed in previous combat stress studies, and even less so in peacekeeping literature, in particular, the aggressive euphoria, the platoon/squad leaders loss of cognitive control, and the invulnerability illusion.

The final part of the discussion covers methodological issues. One criticism that could be put forward concerning this type of study is that the informants have given a polished version of their performance. However, there are several reasons to believe that the informants on the whole gave a fairly accurate and valid pictures of what they actually experienced. The informants had nothing personal to gain by distorting their reports, since the interviews are only to be used in research. Almost all of them gave an open impression and described personal failures, fear, and other reactions that obviously are not socially desirable. Those informants that experienced the same events gave, apart from peripheral details, unanimous reports, even if they stressed different aspects. It was important that the informant felt confidence in the aims and methods of the study. The 'one-on-one' nature of the interview situation may help to build up this confidence. However, there is always some kind of psychological processing that will affect the memory of an emotionally loaded incident. Similar problems apply to many retrospective self-report studies in psychological research.

Another limitation may be the amount of time that passed between the incident and the interview. However, there is no practical and financial possibility to have a research psychologist in a constant state of alert on a peacekeeping mission. The accuracy of the reports in the present study is supported by the facts that the narratives were exhaustive and also by the fact that they could be related to each other and to other research in a meaningful way. There is generally little evidence that emotional stress is bad for memory. Central detail information is better retained, whereas peripheral detail information is less well retained from emotional events, compared with neutral counterparts.<sup>19</sup> There is also support from disaster research that danger incidents are well remembered several months after the event.<sup>20</sup> How

accurate the reports are can only be validated by other studies, and the purpose of this study was to form a basis for such studies by mapping the character of possible outcomes.

In addition, it is possible to question if the present study has given a complete account of all possible reaction patterns, since it had an explorative aim. The judgement made in the present study was that the last interviews only contained variations of already identified themes, which is the common criterion.<sup>21</sup> There may still be reaction patterns not described, either because they were subconscious or because they had no subjective relevance to understand the behaviour in that specific situation.

Another limitation is that the informants made the judgement of the performance themselves. However, an objective performance grading in the peacekeeping context is complicated, since there is no absolute consensus on how to define the desired behaviour in specific situations.

Validity and reliability criteria appropriate for quantitative and hypothesis-testing studies are not relevant to the present study.<sup>22</sup> There is no objective truth accessible on which an outside observer could possibly capture what the informant really did experience. Furthermore, there is no absolute truth as to how to code an interview material, although several coders can reach a consensus. However, the second and third authors checked their agreement of the present analysis by following it backwards. This study's conclusions have been presented to several categories of people with peacekeeping experience, to which they have all given reasonable confirmation that the conclusions are coherent with their experience. Another checkpoint is that the study's conclusions are interpretable and consequential, both in relation to each other and in relation to other research previously discussed.

So far we only know about Swedish experiences. There are, however, differences between countries participating in peacekeeping with respect to selection, education, organisational culture, experience of the danger encountered, and command structure. The impact of these differences on danger adaptation should be an aim for future research. To validate and develop the present models, there is a need to systematically test them, using representative samples of peacekeeping personnel in different kinds of missions.

## NOTES

- 
- <sup>1</sup> Janis A. Cannon-Bowers, and Eduardo Salas (ed.), *Making Decisions under Stress*, Washington DC: American Psychological Association, 1998.
- <sup>2</sup> Thomas E. Drabek, *Human Systems Responses to Disaster: An Inventory of Sociological Findings*, New York: Springer-Verlag, 1986;
- Shabtai Noy, 'Combat Stress Reactions', in Reuven Gal and A. David Mangelsdorff (eds.), *Handbook of Military Psychology*, Chichester: John Wiley & Sons, 1991, pp. 507-30.
- <sup>3</sup> Ask Elklit, 'UN-soldiers Serving in Peacekeeping Missions: A Review of the Psychological Aftereffects', *International Review of the Armed Forces Medical Services*, Vol. 71, No. 7/8/9, 1998, pp.197-208;
- C. D. Lamerson and E. K. Kelloway, 'Towards a Model of Peacekeeping Stress: Traumatic and Contextual Influences', *Canadian Psychology*, Vol. 37, No. 4, 1996, pp.195-204;
- Paul T. Bartone, Amy B. Adler, and Mark A. Vaitkus, 'Dimensions of Psychological Stress in Peacekeeping Operations', *Military Medicine*, Vol.163, 1998, pp.587-93.
- <sup>4</sup> Anders Carlström, Tom Lundin, and Ulf Otto, 'Mental Adjustment of Swedish UN Soldiers in South Lebanon in 1988', *Stress Medicine*, Vol.6, 1990, pp.305-10;
- Tom Lundin and Ulf Otto, 'Stress Reactions among Swedish Health Care Personnel in UNIFIL, South Lebanon 1982-1984', *Stress Medicine*, Vol.5, 1989, pp.237-46.
- <sup>5</sup> Marianne Bache and Birgitte Hommelgaard, *Danske FN-soldater: Oplevelser og stressreaktioner [Danish UN-soldiers: Experiences and Stress Reactions]*, Copenhagen: Defence Centre for Leadership, 1994;
- Eva Johansson, *In a Blue Beret*, Karlstad, Sweden: National Defence College, 1997;
- Eva Johansson and Gerry Larsson, 'A Model for Understanding Stress and Daily Experiences among Soldiers in Peacekeeping Operations', *International Peacekeeping*, Vol.5, No.3, 1998, pp.124-41.
- <sup>6</sup> Elklit (n.3 above).
- <sup>7</sup> Lars Weisaeth, 'Stress of UN Military Peace-keeping', *Wismic Newsletter*, Vol. 2, No. 2, 1990, pp.15-18;
- Lars Weisaeth and Arne Sund, 'Psychiatric Problems in UNIFIL and the UN-soldier's Stress Syndrome', *International Review of the Army, Navy and Air Force Medical Services*, Vol. 55, 1982, pp.109-16.
- <sup>8</sup> Lamerson and Kelloway (n.3 above).
- <sup>9</sup> For data on the battalions as a whole, see: Johansson (n.5 above).
- <sup>10</sup> Barney G. Glaser and Anselm L. Strauss, *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Chicago: Aldine, 1967;
- Kerry Chamberlain, 'Using Grounded Theory in Health Psychology: Practices, Premises and Potential', in Michael Murray and Kerry Chamberlain (eds.), *Qualitative Health Psychology: Theories and Methods*, London: Sage, 1999, pp. 183-201.

- 
- <sup>11</sup> Linda S. Perloff, 'Perceptions of Vulnerability to Victimization', *Journal of Social Issues*, Vol. 39, 1983, pp.41-61.
- <sup>12</sup> Ibid.
- <sup>13</sup> A. D. Baddeley, 'Selective Attention and Performance in Dangerous Environments', *British Journal of Psychology*, Vol. 63, No. 4, 1972, pp.537-46.
- <sup>14</sup> Ronnie Janoff-Bulman and Christine Timko, 'Coping with Traumatic Events: The Role of Denial in Light of People's Assumptive Worlds', in C. R Snyder and Carol E Ford (eds.), *Coping with Negative Life Events*, New York: Plenum Press, 1987, pp.135-60.
- <sup>15</sup> Lundin and Otto (n.4 above); Weisaeth (n.7 above); Weisaeth and Sund (n.7 above).
- <sup>16</sup> Dave Grossman, *On Killing: The Psychological Cost of Learning to Kill in War and Society*, Boston: Backbay Books, 1995.
- <sup>17</sup> Ben Shalit, *The Psychology of Conflict and Combat*, New York: Praeger, 1988.
- <sup>18</sup> Samuel Lyman A. Marshall, *Men against Fire*, New York: William Morrow, 1947; Fredric Smoler, 'The Secret of the Soldiers Who Didn't Shoot', *American Heritage*, March 1989, pp.37-45.
- <sup>19</sup> Sven-Åke Christiansson, 'Emotional Stress and Eyewitness Memory: A Critical Review', *Psychological Bulletin*, Vol.112, No. 2, 1992, pp.284-309.
- <sup>20</sup> Fran H. Norris and Krzysztof Kaniasty, 'Reliability of Delayed Self-reports in Disaster Research', *Journal of Traumatic Stress*, Vol. 5, 1992, pp.575-88.
- <sup>21</sup> Glaser and Strauss (n.10 above); Chamberlain (n.10 above).
- <sup>22</sup> Matthew B. Miles and Michael A. Huberman, *Qualitative Data Analysis*, Thousand Oaks: Sage, 1994; Steinar Kvale, *Interviews: An Introduction to Qualitative Research Interviewing*, Thousand Oaks: Sage, 1996; Chamberlain (n.10 above).