

# NZ Defence Force Response to the Christchurch Earthquake of February 2011

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Psychologists in the New Zealand Defence Force (NZDF) work in organisational psychology, adapted to a military context. We provide psychological services to individuals and commanders in the NZDF in order to enhance the operational effectiveness of the organisation. One increasingly important aspect of military psychology is support of individual and team resilience enabled by a comprehensive mental health and well-being strategy, particularly in operational environments. Within the NZDF, the Mental Health and Well-being strategy outlines responses to Critical Incidents. This ensures the management of critical incidents and a resilient Defence Force at all levels.

The NZDF applied this resiliency framework in their response to the 6.3 magnitude earthquake in Christchurch on 22 February 2011. The NZDF followed direction from the New Zealand Government under the civil defence guidelines, and deployed a Quick Reaction Force from Burnham military camp to assist with the immediate response. This was followed up with additional units from around the country. This presentation will explore the NZDF psychological response to the Christchurch earthquake and how the NZDF sought to reinforce mental health and well-being through its resiliency framework.

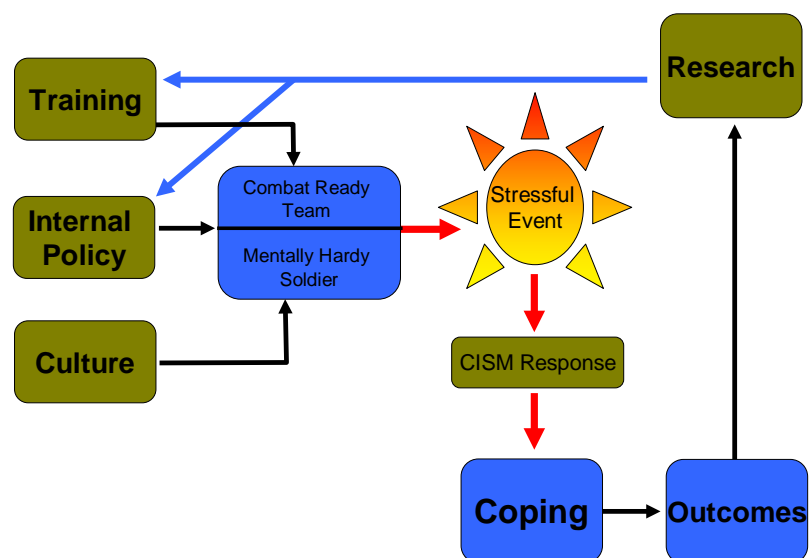
Resiliency is important in the NZDF, not only because we potentially expose our people to a more extreme range of experiences than most organisations, but because of the risk involved in military operations. Therefore, it is extremely important that our teams are able to maintain and sustain their effectiveness, not only in an international context but also domestically. The NZDF adopts a positive and conscious approach to promoting individual and team

resilience by reinforcing the natural innate coping ability within most individuals. We try to steer away from treating personnel as victims; implying that they are somehow "broken" or that they will be unable to cope without external help. Instead we focus on reinforcing individual resilience skills, and developing supportive social systems.

## The NZDF Resiliency Model

We encourage this positive approach to resiliency through three mechanisms (see Figure 1). The first is through training, although this is not just psychological training. Resilience training involves discussing how to reinforce people's stress management and how to build cohesive teams.

▼Figure 1: NZDF Resiliency Model.



Again, this is known to be protective for an individual under stress. The preparation training also endeavours to create environments similar to those faced on live operations. This ensures the expectations and confidence of soldiers, sailors and aircrew are well founded when they are exposed to stressful or challenging situations, and that they have a sense of efficacy and control. Internal policy supports this approach to training and enables standardised and comprehensive implementation. NZDF policy also seeks recommendations and guidance from specialists like psychologists and medical officers when supporting individuals and commanders dealing with the psychological demands of operations. CISM = Critical Incident Stress Management.

It is important to keep in mind that military personnel are "people"; they are not robots and are not distant from or impervious to the range of reactions that others experience. While the NZDF provides a framework around resiliency and Critical Incident responses, the nature of a military career means that personnel are at risk of more stressful events than the NZ population. Psychologists need to be mindful of this reality and provide support to individuals within the organisation accordingly.

The comprehensive approach to building resilience in the NZDF aims to create two things. First we aim to create a mentally hardy sailor, soldier, or aircrew person. A second aim is to create a cohesive combat-ready team - also an important psychological protective factor. This prepares NZDF personnel for the eventuality of a stressful incident. If a stressful event does occur, the NZDF supports the individual's coping by implementing psychological processes such as the Critical Incident Management (CIM) response. This prompts a multi-level response from the commander to the individual on the ground, reinforcing healthy individual and group coping mechanisms. Those who require further intervention are managed through the CIM process, with a clinical referral if necessary, in accordance with NZDF policy. This allows for the service member and organisation to balance the demands

of their life and work. Following this, the outcomes associated with training, response and management of stressful events are recorded, and fed into research, informing NZDF policy and the content of training.

### **The NZDF Psychological Response to the Christchurch Earthquake**

Immediately following the February earthquake, it was apparent to all of New Zealand that a catastrophic event had occurred. Christchurch City declared a local emergency which was soon superseded when the Minister of Civil Defence declared a state of national emergency. As part of the civil defence response the NZDF undertook its largest ever humanitarian assistance mission.

At the peak of our response operation, nearly 1,800 Defence Force personnel, across all three services were directly involved on the ground in Christchurch. In support of the response many more of our people were working behind the scenes in camps and bases around New Zealand. Examples of NZDF roles included cordon duty, medical support, body recovery (Urban Search and Rescue), disaster victim identification, demolition, environmental health, catering, labour tasks, and freight logistics.

On any mission that NZDF personnel participate in, there is an expectation that their training will kick in, and that they will cope. The response to the February earthquake was no exception. However, it is also acknowledged that the nature of the event and the roles personnel were engaged in included a real potential for stress and trauma. As such the NZDF Directorate of Psychology began to determine the most appropriate response for NZDF.

### **Operational Considerations**

Once the need for an NZDF disaster response was identified, we had to determine what the mandate psychological services would have in this novel operational environment. It became clear that the first aim for the

NZDF psychology service's effort was to address the potential adverse affects through the education on self-care, normalising reactions and identifying high risk personnel. This was not a simple goal. The time and space restrictions that are part of these immediate-type disaster responses limited how quickly we were able to respond and restricted the resources that were able to be provided. Subsequently, the NZDF was able to deploy three psychologists immediately to the disaster area by Thursday 24 February.

Management of NZDF psychologists was the responsibility of the Joint Forces psychologist, who identified that a rotation policy was necessary in order to keep our psychologists focused and protect them from burn out. As members of the NZDF, psychologists are required to provide a force that can deploy at short notice. However psychology service managers soon became aware that it was equally important that the response be sustainable for an extended period of time.

In terms of initial personal perceptions, psychologists on the ground were seeing a number of shocked people, and a lot of "thousand yard" stares indicating tired and affected individuals. It was interesting observing our people over the initial period of the effort with several of them showing behavioural indicators of stress through their body language and demeanour. When under stress, military culture can have a tendency to focus on the task, and thus dismissing small niceties when interacting with others. For example, we saw a military person respond to a question about the location of a group of people by using fast striking hand gestures while stating "It's over that way" in a clear loud voice that may have come across as dismissive or impatient. While this is a facet of working in the military, it complicated the work of the NZDF psychologists, given that the specialty lies within the interpersonal realm and this was one area that appeared to be affected significantly by the stressful event. This required finding new ways to encourage commanders to follow through with psychologist's recommendations without being

sneaky or "directing" commanders, which has its own issues. It was here we found the use of internal policy to back up what we were trying to do useful in keeping commanders and individuals onboard with the importance of giving people the opportunity to get the support they required.

On arrival in Burnham camp, important key relationships that would enable the conduct of the psychological response were identified and established. Significant groups of interest (such as engineers, medics etc) to follow up in the next few days were also identified. This was followed by an assessment of where the greatest need for psychological support lay for NZDF personnel. Given we had such a large number of Defence Force personnel involved, it quickly became apparent that one-on-one interviews with every single person involved would be impossible. Thus, identifying high risk people such as the Disaster Victim Identification (DVI) team, Defence Force members of the Urban Search and Rescue team, and some of our other medical and engineering teams were seen as priorities. Other questions that were considered to guide our resources effectively were around the expectations of command, what resources were available, and establishing whether current psychological resources were relevant and appropriate for the context. Once we had considered these aspects, resources were developed from documents we already had, as well as creating specific resources for this unique situation.

### Resource Development

One of the main resources created included entry and exit briefs for those arriving and departing the disaster area. This largely consisted of education briefs about normalising reactions, reinforcing people's natural resilience, and making sure that NZDF personnel knew when and where to seek help. Given that most people had received on this content prior to the deployment, this was more a reminder than further training, although it also gave us an opportunity to check if anyone had seen anything they

considered particularly unpleasant or disturbing. We found this latter aspect important as it surprisingly detected quite a few people who were having some difficulty from that one question alone.

Delivery of this 'pre-deployment training' content was interesting in itself. There was one example where, at 3am in the morning, Palmerston North Army personnel were receiving an entry brief prior to their departure for Christchurch. Their expressions were a mix of excited individuals looking forward to the challenge, and others who were dog tired after preparing their teams and needed a rest. Despite the time and space constraints, discussions with personnel later indicated that the message did indeed get through, and this was considered a small win for the psychological aspect of the operation.

As a part of the exit briefs, high risk individuals who were potentially exposed to significant trauma were screened, using a process based on research conducted with allied militaries and adapted by the NZDF. This process aims to identify individuals who may be suffering from the effects of a CI, and manage them accordingly - either through the clinical referral process or other follow-up mechanisms. While a number of people were identified during the screening process, NZDF personnel also enjoy support from commanders on the ground, which is a critical element of the resiliency model in the NZDF. Commanders on the ground enable a supportive environment and cohesive teamwork, augmenting the NZDF resiliency framework. Further, as they typically know their people best, commanders are in the best position to identify individuals that are distressed, and can provide advice and direction on where to seek help. The value of training prior to the event became apparent when several commanders approached psychologists about individuals who had experienced some potentially traumatic events. One such individual had been through a pretty disturbing experience and reported anxiety and stress to her commander, who then directed her to the psychology service. She was referred to clinical

psychologists in accordance with our referral protocol and responded well to the supportive environment provided by her commander.

While the NZDF has its own CIM response protocol in place that guided the response to the earthquake, this was modified given the novel situation. One of the modifications to the CIM response was the creation of a data management system. This aimed to track the different interventions conducted for different groups of personnel and allowed the management of follow ups at a later stage. It was recognised early on that in this unique operational environment, a data management system was required to manage the massive number of individuals potentially exposed to stressful environments. While this was a practical consideration, this was also a policy and ethically driven one to make sure we follow through on our obligations as a responsible employer.

### Focus Change

As time progressed, the role of the NZDF shifted from immediate disaster relief to assisting the NZ Police in ensuring that the 'red zone' areas were secured. This was termed 'cordon duty' and brought with it its own set of stressors. These included NZDF personnel being placed in an area with frequent aftershocks, fatigue from long and repetitive shifts, boredom, and having to deal with distressed and angry citizens. Hence, cordon duty required personnel to interact with the public and demonstrate a certain level of customer service; a skill which most individuals would not immediately identify with the military. This customer service focus required a mental shift for many of those on the ground whereby they needed to be aware not only of their own reactions to the Christchurch earthquake, but also those of the Christchurch public.

In terms of the NZDF psychological response, entry and exit briefs continued for cordon duty personnel, however the nature of the briefs shifted to match the shift in the nature of the cordon duty role. Specifically, NZDF personnel were briefed not only on reactions that they

may have experienced but also the reactions that the Christchurch citizens may have experienced. Examples included business owners' frustration from not being allowed into the red zone, and uncertainty regarding their futures. In addition, further information was provided on fatigue and boredom. This provided personnel with both a realistic preview of their role and provided strategies for dealing with potential stressors.

Not all personnel entering and exiting Christchurch received entry and exit briefs as a large number of the 1800 NZDF personnel involved with the response were in logistical and behind the scenes roles. Further, in many instances the decision as to whether personnel received psychological support was left to the discretion of commanding officers. At this point, it is worth reiterating that although the earthquake response was identified as an event with the potential for stress and trauma, for the large majority of NZDF personnel the experience was a rewarding one. They took pride and satisfaction from actively making a difference in what was a trying time for so many.

Looking quantitatively at the NZDF psychological response; of the 1800 involved, approximately 500 received entry and exit briefs. Of these, 56 were identified as high risk (e.g. DVI, medical, engineers, individuals involved in or witnessed an unpleasant or disturbing experience). Of the 56 individuals identified as high risk, 11 returned screens that indicated high risk. Five received further support from sources within the NZDF (chaplains, social workers, doctors, and psychologists) and six were referred externally to clinical psychologists.

### **Summary and Reflection**

It is standard practice following all military exercises and operations to conclude with a period of reflection. The NZDF's psychological intervention following the Christchurch earthquake was no

exception. A strength of the NZDF psychology service was that with very short notice an effective psychological response was initiated, psychologists were deployed into the disaster area and maintained over a period of time. Flexibility was apparent in the psychological response, as demonstrated by the quick development of resources to suit the novel environment. This enhanced the ability to respond promptly to the changing demands. The psychology response was also seen as an opportunity for learning and growth within the psychology service, with deployed personnel gaining experience in a unique operational environment. Secondly, the NZDF psychologists had the knowledge, skills and resources to initiate an effective response. Finally, the coordinators of the psychological response ensured that less experienced psychologists were included and supervised throughout in order to provide development and growth. Individual psychologists benefited from involvement in operations and this has built more experience and operational capability in the NZDF.

One developmental area noted was that the effects of Christchurch earthquake on local NZDF psychologists were not entirely considered. While restricting individuals from providing assistance to people in their home location has its own complications, there does need to be a recognition that people from a disaster zone may be affected by the disaster, if not directly then perhaps indirectly through their family. In the future, this will be a consideration in the initial planning process, reducing the risk to individuals being impacted by the incident.

While military psychologists do not have a direct responsibility for cultural affairs within the NZDF, we do have a responsibility to ensure cultural considerations are taken into account in the actions of both the psychology service, and the NZDF. One example of where we could have

done this better was when it was noted that the temporary mortuary in Burnham Camp was located not far from the tented accommodation for soldiers. The obvious cultural implication for soldiers travelling from around NZ was not picked up until several days after, and several soldiers had made comments about it. Given the space restrictions, there was little that could have been done about the location of the accommodation, however better awareness of cultural considerations could have mitigated this issue. Similar operations in the future will think about how psychologists work with the cultural services to better support people in their own culture.

In sum, the NZDF responded immediately to the Christchurch earthquake on February 22, 2011. As part of that response the NZDF psychology services provided assistance to its personnel, as well as to other external agencies. This response was supported by a resiliency model promoting a multi-level approach to resilience through training, internal policy and strong leadership. A feedback loop following management of a stressful event completes the model informing future training and policy. In response to the Christchurch earthquake, NZDF psychologists were required to assess the situation, identify the psychological assistance required, and develop and implement a plan to meet the operational need. Following the downscale of the NZDF in Christchurch, an assessment of the psychological response was conducted resulting in identification of successes and improvements associated with the psychology services response.

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