SUPPORTING MILITARY PERSONNEL TO SPEAK UP IN AD HOC TEAMS DURING NATIONAL CRISIS SUPPORT OPERATIONS: ASPECTS LEARNED DURING THE COVID-19 CRISIS IN THE NETHERLANDS

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Supporting Military Personnel To Speak Up In Ad Hoc Teams During National Crisis Support Operations: Aspects Learned During The COVID-19 Crisis In The Netherlands

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ABSTRACT

In their work, military personnel will face risks and threats: during deployments in ambiguous high risk mission contexts abroad, but also in peacetime in the Netherlands during training programs and exercises or national support operations. In all these contexts, it is crucial that team members speak up: sharing concerns, asking questions and providing ideas supports effective team decision making for coping with risks and threats and in extremis can make the difference between life and death. The situation with military personnel deployed in ad hoc teams in national crisis support operations is the context for this thesis research.

This study investigates aspects that supported speaking up by military medical personnel deployed in hospitals and care homes during the COVID-19 crisis support operation in the Netherlands between March and July 2020. With a short 'notice to move', military medical personnel were deployed in unfamiliar civil structures and ad hoc teams, and faced the threat of the infectious COVID-19 virus. The goal of this research is to provide insight into aspects that support military team members to speak up in unfamiliar, ad hoc composed teams in peacetime (non-hostile) national crisis support operations. These insights may not only be useful for the military organisation to facilitate speaking up in other military disciplines and in military deployments in other national crisis support operations. They may even translate to other industries that are characterised by formal hierarchies and operate in crisis situations.

Results showed that speaking up is supported by (1) leadership invitation to speak up and (2) leadership and others' receptiveness to speaking up. Hierarchy (3) supports team members to speak up in a crisis context, relying upon familiar hierarchical structures and functional roles, empowering military medical personnel to speak up. Finally, (4) team membership stability and (5) individual perceptions of a potential health or safety threat to others (e.g. patients and/or care home residents, civil and/or military colleagues), or to themselves supported speaking up. Practical implications are discussed.

PREFACE

On Thursday 27 February 2020, the first COVID-19 infection in the Netherlands was identified (Rottinghuis, 2020). One week later, on Friday 6 March 2020, the first person died as a result of a COVID-19 virus infection. The number of infections rapidly increased in the weeks that followed. National measures were announced: the Dutch people were asked to stay at home (12 March 2020), schools, restaurants and bars were closed (15 March 2020) and the country faced a national 'intelligent lockdown' (23 March 2020). At the end of March, 12,595 infections were identified and 1,039 people died as a result of a COVID-19 virus infection (Rottinghuis, 2020).

On Tuesday 17 March 2020, the Dutch Minister of Defence announced that the defence organisation was preparing for assistance in the fight against COVID-19: "Fortunately, military support was not necessary yet, but when we have to, we support wherever possible" (Ministry of Defence, 2020a). Within a week, a team of military planners started their assistance for planning the redistribution of patients among hospitals in the Netherlands, in order to relieve the pressure on local hospitals in the southern part of the Netherlands (Ministry of Defence, 2020b). On Monday 30 March 2020, approximately 90 military medical assistants and nurses and 20 military physicians started their deployment in various hospitals and care homes (Ministry of Defence, 2020c). In the months that followed, "350 military medical personnel were deployed at 32 hospitals, nursing homes, care homes, and care hotels throughout the Netherlands" (Ministry of Defence, 2020d).

For this thesis research, I had the opportunity to invite a number of these deployed military medical personnel to participate in interviews and group sessions. I asked them how they experienced their deployment in this military national COVID-19 crisis support operation and what supported them to speak up in these unfamiliar, uncertain and ambiguous contexts. This thesis paper analyses their reported experiences and perceptions.

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1 INTRODUCTION

> I have nothing with yes-men. People should dare to contradict you. Loyalty is daring to say no to your boss three times. If the opportunity is there, you must use all potential that is available in your organisation. When you have a good story, you will have my attention. You will be surprised how many militaries dare to say no to the commander. There is that openness and freedom. But once a decision has been taken, then discussions will end. (Marlet, 2012)

This seems to be a clear message, a clear military guideline, stated by the highest military commander in the Netherlands, the former Chief of Defence general Van Uhm (retd). This message supposes that military commanders will be able to use all available potential in their units, if they allow their people to contradict them.

This importance to 'speak up' was readdressed by the Commander of the Royal Netherlands' Army (RNLA), lieutenant general Wijnen, during the 2020 COVID-19 crisis in the Netherlands. Referring to these exceptional circumstances, he stated that all RNLA personnel should feel comfortable to speak up and address concerns while restarting basic military training and education for new recruits, and with restrictive measures due to this COVID-19 crisis still active in the Netherlands (Wijnen, 2020a). In his day order of 17 March 2020, on conducting national support operations during this COVID-crisis in the Netherlands, he stated (Wijnen, 2020b): "We all feel concerns, for example for family and friends, especially if you are deployed. I do everything possible to not lose sight of these interests. If you have questions, do not hesitate to go ask your commander."

These two examples refer to the possibility for (military) personnel to speak up: share their concerns, ask questions or even come up with better ideas. However, these examples also raise some questions. For example, does 'contradict' or 'say no' mean that you refuse to do your task? That would be neither appropriate nor appreciated in a hierarchical military organization: a notion general Van Uhm (retd) referred to when he argued that decisions are taken and discussions will end (see opening quote). Or does it mean that you suggest a better solution for a problem that can help to improve team performance and safety? And what makes 'a good story', as referred to by general Van Uhm (retd), good enough? How confident are you to speak up with your concerns or ideas when you do not know if your story is deemed good enough by your commander? What will happen if you think that you do not have a good story, but only a 'gut feeling' that a particular plan for action might not be a wise decision?

1.1 Relevance of speaking up in military (hierarchical) organisations

The topic of speaking up (sharing concerns, asking questions or providing ideas) was also addressed in external reports on a fatal accident in 2016 within the Royal Netherlands' Army (RNLA). In its report on a fatal mortar accident in Mali in 2016, the Dutch Safety Board (2017) described that "signals from worried staff were not heeded" (p. 8), concerns that were sometimes expressed "in the form of questions and sometimes in the form of explicit descriptions of their concerns in reports" (p. 74). The Board recommended that the Dutch Armed Forces should "invest in an organisational structure and culture wherein leadership is responsive to critical signs of employees" (p. 10).

Subsequent to this report, the Dutch Minister of Defence asked an external committee to investigate the practices within the Defence organisation, with a main research focus "on decision making, culture and mindset as part of missions and operations" (Van der Veer Committee, 2018, p. 17). The committee advised to "stimulate . . . the idea of a 'Just Culture' that emphasizes learning from errors" (pp. 15-16, parentheses in original). This idea of a just culture "pays attention to safety, so that people feel comfortable to bring out information about what should be improved to levels or groups that can do something about it" (Dekker, 2012, p. 9). The committee argued that the Defence organisation should stimulate learning from errors as military work incorporates risky or hazardous situations that requires sufficient guarantees for safe operational performance. Although various exemption clauses are included in national safety laws and regulations, it "shall be without prejudice that the Ministry of Defence also in the described extraordinary circumstances has a duty of care for the safety of personnel" (Van der Veer Committee, 2018, p. 4).

The Review Committee Defence and Safety (RCDS, 2019) also referred to this "expensive duty of care" (p. 7), but extended this from war situations to the daily businesses in the Netherlands: safe performance for military personnel has various dimensions with risk assessments and levels of risk acceptance. When asked by a journalist what had shocked her most, the RCDS president, Gerdi Verbeet, referred to a shooting exercise visit. Military personnel told her that they did not have the appropriate hearing protection. She stated that, although military personnel are aware of the necessity of safe performance, they "will not say 'no' to their boss at that moment and nevertheless continued their exercise" (Boere, 2019). This observation contradicts the message by general Van Uhm (retd) in the opening quote of this chapter: "You will be surprised how many militaries dare to say no to the commander" (Marlet, 2012).

Referring to this quote and the reports discussed above, it might seem rather difficult to speak up within a military hierarchical organisation: although commanders should listen to their personnel in order to use all available potential in their units, these reports showed that commanders did not respond to signals and concerns of their personnel. This might be a challenge to hierarchically structured military organisations, as they serve a purpose: organising military units in a hierarchical command and control structure is about "the best possible employment of assets to achieve the selected or assigned objective" (Ministry of Defence, 2021a, p. 13) in ambiguous high risk mission contexts. This principle was emphasised by general Van Uhm

(retd) as he stated that "without a robust command, even the best personnel and equipment cannot be employed effectively" (Ministry of Defence, 2021a, p. 3). In these organisations, the commander has the authority or power to issue orders to attached military units (Ministry of Defence, 2021a): "The commander makes the decisions" (NATO Standardization Office, 2017, p. 5-1). Although this power or authority position seems to be straightforward and directive, leaving little room to speak up, speaking up is in fact essential for adequate decision making. Commanders should "create a climate of mutual loyalty and respect . . . [and] be able to tolerate 'loyal opposition' and staff should feel confident to challenge a commander's ideas" (NATO Standardization Office, 2017, p. 5-2; parentheses in original) in order to support decision making. Commanders must "be able to listen constructively to the ideas of his staff and his subordinates without the fear of losing his authority" (Ministry of Defence, 2021a, p. 63). This balance between speaking up, listening and decision making was also illustrated in the opening quote of this chapter.

Military personnel are educated and trained within this military hierarchical system. They act according to the expected leadership-follower roles within these familiar military hierarchical structures. One might even call it a second nature. It is a main principle in military hierarchical organisations that every commander has a higher commander and that "providing leadership also means being able to receive leadership" (Ministry of Defence, 2021a, p. 45). These structures work according to the principles of mission-type tactics or mission command, in which the commander sets the goals to be achieved and his/her guidelines, and provides freedom of action for his subordinates within the borders of these guidelines (Hagemann, Kluge, & Ritzmann, 2012, referring to Keithly & Ferris, 1999). Commanding officers have overall responsibility and decide and issue orders, privates and corporals at the executive level conduct these orders. In between these two groups are the non-commissioned officers (NCO's) who are the experts in their specific disciplines, translate the commanding officers' orders into actions and guide their group of privates and corporals (RNLA, 2015, 2016). This clear top-down structure also enables a bottom-up clarity on role expectations within this system. Hageman et al. (2012) referred to these military structures, rank systems and role expectations when they described the role of a lead anaesthetist in an anaesthesia team: "if complications arise, everybody "looks" at him/her and now expects him/her to be in charge of the patient" (p. 329, parentheses in original). This example is an apt description of how (familiar) military structures and functional roles work: the highest commander on scene is expected to take the lead and make the appropriate decisions. And to be able to make the right decisions, a commander should listen carefully to the advices of his/her personnel.

The examples, external reports and main principles of military hierarchical organisations discussed above illustrate that for military personnel, whether deployed in mission areas or conducting peacetime activities (such as training activities), it is crucial to speak up. Sharing concerns, asking questions and providing ideas supports effective team decision making for mitigating risks and threats in varying degrees, and in extremis can make the difference between life and death. Therefore, this thesis research is interested in understanding what aspects support military personnel to speak up.

1.2 Speaking up in the context of national support operations

In hostile mission contexts abroad, in the face of enemy threats, the importance of speaking up is unequivocally clear to military teams. Because of the dangerous, high-risk contexts during mission deployments, it seems logical that this is the main focus during the preparation for deployment in war situations (RCDS, 2019). In fact, unit training is mainly focused on scenarios at the highest end of the force spectrum (Ministry of Defence, 2021b), through intensive unit building and training programs, using familiar structures, roles and procedures. In addition to these 'skills and drills', training is aimed at building "a close-knit team with a strong problem solving capability" to be decisive in combat (Ministry of Defence, 2018a, p. 14), using the principle that 'nobody is more important than the team' (e.g. Adams, 2020; Van Wiggen, 2016). With these cohesive teams regarded as the core of training and performance, stable fixed teams enable team members to develop mutual trust, respect and comradeship (e.g. Ministry of Defence, 2020e). These team characteristics, as well as the undeniable presence of these hostile threats during mission deployments, enable military personnel to speak up about threats or ambiguities within their team without too much hesitation.

However, most of the time, military personnel will not be deployed in missions areas, but spend their working hours in the Netherlands (RCDS, 2019). They conduct regular and planned activities (e.g. training, exercises, maintenance of military equipment), but are also available for unplanned support for "civil authorities with respect to law enforcement, disaster relief and humanitarian assistance, both nationally and internationally" (Ministry of Defence, 2018b, p. 9). As such, the armed forces are "ready to act in the event of exceptional circumstances" (Ministry of Defence, 2020f). National crisis support operations are characterised by three properties. First, military personnel can face specific risk and threats, such as flooding rivers (e.g. Ministry of Defence, 2012) and poisonous materials (e.g. peroxide in containers flooded at the beaches of Dutch islands; Ministry of Defence, 2019). Second, military personnel are confronted with a (very) short 'notice to move': within 48 hours after a request military personnel are available for action (Ministry of Defence, 2020g). A third and final property of military crisis support is that it takes place under civil authority (e.g. mayors) instead of operating under (familiar) military command structures (Ministry of Defence, 2020f). Existing organizational structures might be reorganised as the deployment depends both on availability of personnel and presumed tasks (e.g. individuals, ad hoc teams).

Unlike high risk conflict mission contexts abroad, the potentially lethal enemy threats are absent in these peacetime activities. Therefore, team members might perceive the importance of speaking up about threats or ambiguities within their team as less obvious when conducting these peacetime activities. Moreover, speaking up might be particularly difficult when team members are deployed outside their own stable, fixed teams in ad hoc composed teams, as can be the case during national support operations. Because of the strong contrast with the 'normal' focus on high risk and hostile mission contexts (RCDS, 2019) and performing in stable, fixed and familiar teams, a national support operation is chosen as the context for this thesis research. More specifically, the deployment of military medical personnel in a national support

operation during the COVID-19 crisis in the Netherlands in the first half of 2020 is chosen as the context for understanding aspects that support military personnel to speak up.

This research context is especially interesting as the RCDS referred to this specific type of deployment in its second report. The RCDS (2020) stated that the military support for the care of COVID-19 patients again showed that the Armed Forces are really good in "improvising and dealing with issues quickly and efficiently" (p. 6). This statement confirms how successful this national crisis support operation was perceived. However, from the perspective of safe performance in crisis situations, was it also perceived positive regarding the ability for military personnel to speak up?

From March to July 2020, 350 military medical personnel were deployed in 32 hospitals, nursing homes, and care hotels throughout the Netherlands (Ministry of Defence, 2020d). They were added to hospital ICU teams and/or care home staff for conducting executive tasks ('hands on the beds') in order to reduce the pressure on these care systems, as hospitals were overwhelmed by the amount of COVID-19 infected patients and care homes were confronted with reduced care capacity as infected staff had to stay at home. This deployment was exemplary in terms of the three properties of national support operations discussed earlier: military personnel faced a specific threat (i.e. the infectious COVID-19 virus), were confronted with a (very) short 'notice to move' (e.g. the next day), and the support took place under civil (hospital/care home) authority with reorganising existing military structures (deployment in unfamiliar ad hoc teams). As military personnel were suddenly taken out of their own world of familiar and stable teams and were deployed in ad hoc composed teams in an unfamiliar context, it is expected that speaking up might be particularly difficult for them in this specific type of deployment.

This leads to the following main thesis research question:

> *What aspects support military personnel to speak up in ad hoc teams during national crisis support operations?*

By answering this research question, I expect to contribute to a topical and practical issue: the further and broader improvement of facilitating speaking up in military deployments in national crisis support operations. These insights may even translate to other industries that are characterised by formal hierarchies and operate in crisis situations.

2 PSYCHOLOGICAL SAFETY AND SAFETY VOICE LITERATURE

In order to answer the research question in terms of aspects that support speaking up, the scientific literature was studied. Two things stood out. First, two main bodies of literature - i.e. psychological safety and safety voice – explicitly address or even pivot around the topic of speaking up. Both bodies of knowledge will be queried for aspects that support speaking up. Second, within these two main bodies of literature, very little studies have been published on speaking up in military organisations, supporting the relevance of this thesis research conducted within the Dutch defence organisation.

Over the past 20 years, a growing body of academic literature (Edmondson, 2019) has found 'psychological safety' to be pivotal in facilitating learning behaviour (e.g. speaking up), in order to improve performance and reduce errors and harm from incidents in the workplace. "For a team to discover gaps in its plans and make changes accordingly, team members must test assumptions and discuss differences of opinion openly rather than privately or outside the group" (Edmondson, 1999, p. 353). These activities closely relate to the aim of military unit training to build teams that have strong problem solving capabilities, as discussed in the previous chapter.

Edmondson (1999) introduced a definition for team psychological safety: "a shared belief held by members of a team that the team is safe for interpersonal risk taking" (p. 350). Team psychological safety suggests "a sense of confidence that the team will not embarrass, reject, or punish someone for speaking up" (p. 354). The relation between team psychological safety and team performance is mediated by learning behaviour, that includes seeking feedback, sharing information and asking for help, and as such, refers to the notion of speaking up. Newman, Donohue and Eva (2017) argued that psychological safety is a valuable and important resource "in hazardous work contexts where speaking up and providing feedback is imperative in order to reduce errors and improve safety" (p. 528).

More recently, in the last 10 years, academic literature on safety voice emerged (Noort, Reader, & Gillespie, 2019): a concept describing "acts of communication aimed at preventing physical harm through communicating safety concerns to others" (p. 375). These acts of communication (i.e. speaking up) are relevant for supporting effective team decision making in order to mitigate risks and threats that military personnel are confronted with in their work. Various definitions of safety voice have been used, for example "the act of speaking up to prevent physical harm from hazardous situations" (Noort et al., 2019, p. 375, referring to Bienefeld & Grote, 2012); Tucker, Chmiel, Turner, Hershcovis and Stride (2008) argued that safety voice implies that individual employees communicate in order to improve safety conditions. Also, the overlap between 'safety voice' and 'employee voice' research has been a topic for discussion. Noort et al. (2019) concluded that both are related, but safety voice is distinct as "safety voice involves raising a safety concern in response to a perceived hazard" (p. 384). They included this safety concern in their ecological framework with interacting safety voice antecedents, as "the unsafe event dynamically shapes and is shaped (i.e., a feedback loop) by the social context of individuals, groups, and institutions and external

environment" (p. 385), and synthesised a definition for safety voice: "explicit communication that is (1) discretionary, (2) aimed at improving a perceived unsafe situation, and (3) addressed to others of equal or senior status" (p. 382).

As shown by these examples, studies in both bodies of knowledge show the importance of speaking up for reducing errors and responding by team members in hazardous contexts, and propose aspects that support speaking up. First, psychological safety literature reveals various aspects or antecedents (e.g. Edmondson, 1999, 2019; Newman et al., 2017) that contribute to psychological safety and therefore to learning behaviour, such as the act of speaking up. The most prevalent and relevant aspects for speaking up according to the psychological safety literature are (a) team leader coaching (supportive leadership behaviours and styles), (b) context support (resources and structures), (c) relationships networks (e.g. communication frequency and trust), (d) individual confidence and (e) organizational practices (e.g. hierarchy).

Three studies on psychological safety conducted in military organisations confirmed two of these aspects, team leader coaching (leadership) and relationship networks (trust), in a military context. Two qualitative studies, one in an elite combat unit in the Israel Defence Force (Ben-Horin Naot, Lipshitz, & Popper, 2004) and one in an international (Baltic states, Finland, Austria, Switzerland) staff exercise for a training audience of 438 student officers (Hedlund, Börjesson, & Österberg, 2015), showed that team leader coaching (receptive and supportive leadership) improved psychological safety. A quantitative study in 100 selected Belgian military teams that were deployed in one of four mission areas (Afghanistan, Kosovo, Lebanon, Democratic Republic of Congo) showed the importance of relationship networks (interpersonal trust) in uncertain and risky situations (Veestraeten, Kyndt, & Dochy, 2014).

Moreover, Edmondson (2019) and Newman et al. (2017) pointed to the development of psychological safety within teams, and that its strength might change across the different stages of team development. This also applies to the training and exercise programs of stable military teams that prepare for missions abroad. However, what will be the role of psychological safety in ad hoc composed teams, when there is no time available for these developmental stages? In a study on interdisciplinary action teams in operating rooms, Edmondson (2003) referred to this context where members of a larger pool are "put together [in] a subset of members at a given point of time" (p. 1425). Her study showed that in such contexts, team leader coaching supports team members to speak up.

Second, in safety voice literature, many aspects have been proposed that support safety voice (i.e. the act of speaking up). For example, Noort et al. (2019) extracted not less than 256 antecedents to safety voice. Studies show that safety voice is affected by individual, group or team, organisational, and contextual or situational aspects, and that various models or perspectives are suggested for studying safety voice (e.g. Noort et al., 2019; Okuyama, Wagner, & Bijnen, 2014). The most prevalent and relevant aspects for speaking up according to the safety voice literature (e.g. Morrow, Gustavson, & Jones, 2016; Noort et al., 2019; Okuyama et al., 2014) are (a) the perceived risk or hazard, (b) organisational support or resources (e.g. commitment to open culture, enabling structures), (c) hierarchy and power, (d) relationships with other

team members, (e) attitude of leaders/superiors (e.g. caring, inviting, receptive leaders), (f) perceived (self-) efficacy or (self-) confidence based on experience, and (g) perceived cost of voice or safety to speak up (fear for responses of others).

Because military organisations are characterised by formal hierarchical structures, as discussed in the introduction, it is expected that the aspects of power differences (Edmondson, 2003) and hierarchy and power (e.g. Noort et al., 2019) might be specifically relevant for this thesis research, as both bodies of knowledge reveal that hierarchical relationships (i.e. having to speak up to your superior) inhibit speaking up. Edmondson (2019) illustrated this by stating that "hierarchy (or, more specifically, the fear it creates when not handled well) reduces psychological safety" (p. 14) and therefore reduces learning behaviour (i.e. speaking up). Noort et al. (2019) included group hierarchy and institutional hierarchy in their Safety Voice framework as antecedents that appeared to inhibit safety voice. There are also "taken-for-granted beliefs about the risk of inappropriateness of speaking up in hierarchical organizations" (Detert & Edmondson, 2011, pp. 462-463) and "the hierarchical relationship between subordinate and supervisor appears to intensify the mum effect" (Milliken, Morrison, & Hewlin, 2003, p. 1455). Other studies showed these differences between higher-status and lower-status health professionals: Nembhard and Edmondson (2006) argued that "non-physicians, as lower status health professionals, view the cross-disciplinary team climate as less psychologically safe than higher status individuals such as physicians" (p. 946), Malloy et al. (2009) discussed the hierarchical nature of the relation between nurses and physicians, in which "[nurses] felt that they lacked the power to speak against physicians' opinion or believed that their opinion would not be accepted, even if it was voiced" (p. 724). Finally, Edmondson (2019) argued that studies in general showed that lower-status team members feel less psychologically safe than higher-status team members, confirming the examples described above that showed that hierarchical structures and relationships inhibit speaking up.

Combining both bodies of literature, the following aspects might support speaking up by military personnel deployed in national crisis support operations: (a) the perceived risk or hazard (i.e. the thing to speak up about), (b) supportive and receptive leadership behaviour, (c) relationships with other team members, (d) organisational support (enabling resources and structures), and (e) perceived self-confidence (i.e. feeling capable to conduct the required tasks without compromising patient safety). These aspects will be used in analysing the results of this thesis research, integrating participants' reports and previous literature on psychological safety and safety voice.

3 METHOD

The topic of speaking up has been studied from various domains and perspectives, each with their own preferred methodologies and methods. The psychological safety literature seems keen on building on an objectivist epistemology, typical for experimental psychology, including its preference for using survey methods. For example, most studies in this body of knowlegde used the 7-Item Psychological Safety Questionnaire (Edmondson, 1999) for gathering data (Newman et al., 2017). Statistical analyses are used in order to test models and hypotheses and to measure psychological safety (Edmondson, 2019).

On the other hand, the safety voice literature relies on a more constructivist epistemology, as "meaning is attributed to absences [e.g. safety (i.e., the absence of harm)], and this implies that safety voice is a process of social construction" (Noort et al., 2019, p. 384). Safety voice research balances between quantitative and qualitative methods, and between post-hoc reports and in-situ observations (Noort et al., 2019). This preference for observational methods might pose ethical challenges to the in-situ study of safety voice, as this suggests purposefully exposing researchers to dangerous situations in which the "short-lived nature of safety voice [might be observed, as safety voice] is difficult to encounter spontaneously" (Noort et al., 2019, p. 385). This might also be the case if this thesis research would apply ethnographical inspired methodologies and methods (e.g. observation) in an infectious COVID-19 environment.

This thesis research is inspired by a more constructivist approach, as it is interested in understanding how military personnel gave meaning to uncertain and ambiguous situations during their deployment and what aspects supported them to speak up in these contexts. The research includes post-hoc reports of participants, approximately three months after the termination of this national crisis support operation, using qualitative methods (interviews and group sessions) with the intention to initiate an open discussion, creating opportunities for spontaneous sharing of experiences, thoughts and storytelling. Semi-structured individual interviews and group sessions were used with only a limited number of questions (see the interview protocol in Appendix A). Given the specific context (ad hoc teams and military personnel), two specific themes or aspects were systematically discussed at the end of the interviews and group sessions: the development of a (psychological) safe context to speak up, as well as issues of status, power and hierarchy. In addition, for each hospital or care home deployment, a quantitative survey was used during these interviews and group sessions, i.e., a Dutch translation of the 7-Item Psychological Safety questionnaire (Janssen, 2011; Rupert & Jehn, 2008; see Appendix A).

In order to create an open context for the interviews and group sessions, despite the existing hierarchical rank differences between the researcher and the participants, this main body of the interview protocol was preceded by a general introduction of the research and the researcher (e.g. informed consent, research objectives, minimising status or power differences; see Appendix B), as well as preliminary questions to check background information (e.g. age and tenure; locations and periods of deployment). The interview protocol closed with the possibility to raise questions, and repeating the subsequent steps in the research.

Appendix C presents the selection process for the participants and includes an overview of participants' original units and deployment locations and periods (all coded to ensure anonymity). The maximum total deployment period was approximately three months, interrupted by one or two short periods of recuperation and preparation for the subsequent hospital or care home. The group of participants included both personal healthcare assistants (8 PHC assistants[1]; ranked private or corporal) and nurses responsible for general care (6 GCM nurses[2]; ranked sergeant or sergeant major). Although the GCM nurses are non-commissioned officers (NCOS's) and as such have a higher status than lower-status privates and corporals in the regular military hierarchical structures (see section 1.1), it was expected that both PHC assistants and GCM nurses would be executive members of civil ad hoc teams during their deployment and would follow the instructions and orders of civil leadership or authorities (e.g. ICU nurses, care home team leaders). Three higher-status physicians were not selected, as it was expected that they would have more individual care tasks (e.g. individual patient consultations) to be performed, instead of working as an executive member within a team.

Interviews and group sessions were recorded using a voice recorder. After transcribing the recordings, this data was analysed using an iterative, abductive process to both extract aspects or themes from the transcripts that supported (or inhibited) speaking up, and find relevant explanations or further elaboration, using the aspects identified in both bodies of literature (see the final section in the previous chapter). This iterative, abductive analysis draws on examples from the transcripts of the interviews and group sessions and by outcomes of the 7-item psychological safety questionnaire filled out by participants, including specific answers in the open text box in the questionnaire. The examples from the Dutch transcripts were translated into English by a native speaker expert of the Defence Language Centre. The researcher cross checked if the essence of these translated English texts covered the subject matter in the discussions and interactions with and among participants in the interviews and group sessions.

[1] In Dutch VIG (Verzorgende Individuele Gezondheidszorg)
[2] General Care Military nurse, in Dutch AMV (Algemeen Militair Verpleegkundige)

4 INTEGRATING PARTICIPANTS' REPORTS AND PREVIOUS LITERATURE

Both in the individual interviews and the group sessions, participants discussed many topics they experienced during their deployment period, and whether they were (or were not) able to speak up within these contexts of hospitals and/or care homes. Before discussing the aspects that supported them to speak up, the general assumptions of military deployments for national crisis support operations (see section 1.2) are verified for this specific deployment.

4.1 Assumptions of military deployments in national crisis support operations

As discussed in the introduction chapter, the specific deployment studied in this thesis research was exemplary in terms of the three general properties of national crisis support operations: military personnel (1) faced a specific threat (i.e. the infectious COVID-19 virus); (2) were confronted with a short 'notice to move' (e.g. the next day), and (3) the support took place under civil (hospital/care home) authority with reorganising existing military structures (deployment in civil ad hoc teams). This section describes examples reported by participants that evidence these assumptions for this specific military deployment.

First, participants were aware that in this deployment they would face the threat of being infected by the COVID-19 virus. They were deployed in order to support hospitals that treated COVID-19 infected patients, or care homes with residents that were, had been or could become infected by the COVID-19 virus. For example, personal healthcare (PHC) assistant [R11] reported that she faced the "risk of infection [in care home [C1]]: that was the only location where I thought "right, I . . . don't really want to be here", so to speak". Regarding her earlier deployment in hospital [H1], she confirmed that the virus was present, but reported that she didn't feel to be at risk, "as you are very well protected when you enter [the hospital]. You really won't enter without gloves, apron, glasses, face mask, hairnet . . . with everything". However, when confronted with an infected patient in hospital [H1], she "thought it was intense". Participants reported other examples of the presence of the virus and the perception of the threat or risk of being infected: a nurse responsible for general care (GCM nurse [R18]) reported "yes, [the virus] was going around . . . [but] it didn't feel like "woah, COVID", no" in hospital [H1], PHC assistant [R35] was worried for being infected as the virus was present in care home [C2], PHC assistant [R41] and GCM nurse [R18] reported that many care home staff became ill due to the COVID-virus, and GCM nurse [R17] reported the same issue for care home [C9]: "two departments were fully contaminated by COVID . . . many staff was sick at home, an enormous misery".

Second, participants reported the (very) short 'notice to move'. For example, GCM nurse [R15] reported, "I was called, sort of, you have to report, I believe, the next day in hospital [H1]". GCM nurse [R18]

reported that he delivered some material to hospital [H1], but at lunchtime, he was called: "just stay there, as you will be deployed immediately". Several PHC assistants reported the short period between being called and actually deployed in a care home, for example "the previous evening" ([R42]) and "the first [deployment] was the previous day, and the second was . . . two hours in advance? . . . Yes, two hours in advance we got the message" ([R37]).

Third, participants reported that they were deployed in care homes under the authority of the civil care home management, thereby abandoning familiar military structures. The medical planning cell of the Army Territorial Operational Command (TOC) was responsible for the deployment of 350 military medical personnel in various hospitals, nursing homes, and care hotels (see section 1.2), but as soon as military personnel were deployed, they were individually placed and scheduled in civil ad hoc teams under the direction and guidance of civil hospital and care home management. As their work consisted of executive tasks ('hands on the beds') in civil Intensive Care Unit (ICU) teams and/or care home staff teams (see section 1.2), the familiar military structure with rank differences between GCM nurses (higher-ranked sergeants and sergeant-majors) and PHC assistants (lower-ranked privates and corporals) was less important: all of them were deployed as staff team members in the civil structures. For example, GCM nurse [R13] reported that in hospital [H1] military personnel were managed by civil ICU personnel: "every day, we gathered with [coordinating] ICU people . . . who are the experts" and who told them what to do every day. PHC assistant [R11] reported that in this hospital, "ranks and positions didn't count anymore". GCM nurse [R18] told that he was scheduled in care home [C1] "as some kind of flex worker on various departments. . . . and then management told me "no, we're gonna schedule you in another department, because care personnel shortages are higher over there". PHC assistant [R40] reported that the [care home C11] manager told him how he would be scheduled ("with someone who is familiar with the department"). An exception on this general rule for deployment in these civil structures was hospital [H1]. As a practical solution for the large amount of military and civil personnel deployed in this hospital, separate military and civil planning teams scheduled the shifts: "that were two separate schedules . . . we were managed by our military planners, they planned, sort of, every two weeks in advance" (GCM nurse [R17]) in order to have adequately staffed ICU-teams. During the shifts, they were directed by civil ICU-nurses and ICU-physicians (see example GCM nurse [R13] above). Moreover, several participants reported that they could contact the military lines of communication and coordination (e.g. TOC medical planning cell, see above) for questions and/or issues on agreed upon safety regulations during their deployments in hospitals and care homes. For example, PHC assistant [R37] reported that in care home [C2], "we had a sergeant major who we could contact for questions . . . but in principle, we were guided by the care home staff". Hence, in general, participants were guided and directed by civil management (i.e. ICU nurses/physicians, care home team leaders/department heads).

These examples establish the COVID-19 deployment that was studied in this thesis as a prototypical national crisis support operation to be investigated for aspects that support speaking up in this context.

4.2 Aspects supporting military (medical) personnel to speak up

The interviews and group sessions revealed five general aspects supporting military (medical) personnel to speak up: (1) leadership invitation to speak up, (2) leadership and others' receptiveness, (3) hierarchy and its structures, roles and procedures, (4) team membership stability, and (5) perceptions of a potential health or safety threat.

4.2.1 The invitation by leadership to speak up

Speaking up (sharing concerns, asking questions or providing ideas) by team members is supported when leadership explicitly invites these members to speak up. For example, when PHC assistant [R11] was asked for what made it easy for her to speak up, she explained that

> If someone says to me, come on, feel free to say what you think, we can learn from it too, then that's an invitation for me, like "oh, there's some scope here, I can use that", and if someone doesn't suggest that, and is really directive, then I think I'm more like "oh right, that person is not open to this, so I'm not saying anything".

She reported that she had only experienced the first (being invited to speak up) during her deployment in hospital [H1] and care home [C7]. For example, in hospital [H1], a senior non-commissioned officer (NCO) was part of the 'runners' team of PHC assistants, "to support us a bit. He guided us during these weeks, was our point of contact. He was easily approachable." She also added that another senior NCO, who facilitated a team evaluation session of her hospital [H1] deployment, invited them to speak up in order to learn from their experiences, and that when one of the team members spoke up, this actually stimulated other team members to speak up:

> There would be no come-back, you could just say it, it's maybe a good thing for next time. . . . I thought it was really great that everyone was just honest about how they'd experienced it. And if one person does it, then you see that everyone does it. And there's always one who starts, and the rest sit back and wait a bit, but I felt that everyone had their say in the end.

In hospital [H1], GCM nurse [R3] reported that every morning before he started his shift, he was invited to discuss issues or questions: "now, what problems did you have yesterday, what can we do differently today, or do you have any questions?" After this day start, during the shift, it was also possible to indicate peculiarities to available staff anytime. GCM nurse [R13] reported that there was always a coordinating nurse available in this hospital to pose your questions, as she "was wandering around everywhere".

These examples show that participants experienced the invitation to speak up by their civilian or military leadership. Some participants reported that they also took up the leadership role themselves, and invited others to speak up to them. In her deployment in care home [C1], GCM nurse [R15] asked her military

colleagues to speak up although they were not working together as a team in their shifts and activities. She took up the role of information provider and listening ear, explicitly asking her military colleagues "ok, did anything happen on your shift? Tell me, then . . . I'll take care of it, either via the military line or the civil line". On the other hand, she also visited and asked civil care home staff personnel to speak up to her: "What problems do you have? What do you feel? And do you miss something, what would you like to see? Just tell your story." In reaction to this explicit invitation to speak up, she received various reactions: "some of them didn't like it, yeah, and others used this as a moment supreme to really have an opportunity to spout their story."

Another GCM nurse ([R3]) also took up the leadership role in care home [C7] and asked others to speak up. He invited others ("let me know") to discuss a certain change and posed questions such as "what would make it better, the changes?" He invited them to speak up as he argued that in this way "you do it together instead of I'm the boss and I'll make all the decisions". He reported that his invitation was accepted by the others team members, in combination with his higher educational level (the care home staff had PHC assistant educational level). They asked him "questions [on his] knowledge on vital values" and all their activities were performed in good consultation within their team.

Scientific literature on psychological safety and safety voice referred to leadership explicitly inviting team members to speak up. For example, Edmondson (2003) argued that explicitly inviting others to give input is a conceptualization of team leader coaching that increases the ease of speaking up. Two studies in military organisations referred to the invitation or encouragement by military leadership in order to support speaking up (Ben-Horin Naot et al., 2004; Hedlund et al., 2015). Also, according to Noort et al. (2019), being invited or encouraged is an antecedent for safety voice, as one of two elements of (leadership) openness. These studies and reviews investigated formal leadership-employee relations. The two examples described above (GCM nurses [R15] and [R3]) suggest that this also applies for informal leaders.

Finally, in their Safety Voice framework, Noort et al. (2019) included two elements for (leadership) openness: 'being invited or encouraged' and 'receptive others'. I suggest that a clear distinction should be made in these two elements: the first is a proactive act of inviting and encouraging team members to speak up, the latter is a reactive act of being receptive to listening to their team members when they actually speak up (see also Tucker & Turner, 2014). Tucker et al. (2008) argued that if management both "invites suggestions for improving safety and appears to take action on ideas, employees are more likely to use safety voice" (p. 322), also illustrating both elements discussed above. They even suggested that managers who are receptive to their employees' ideas may thereby (implicitly) invite them to speak up. The experiences from the participants in this thesis research as outlined above refer to the first element of (leadership) openness, the proactive and explicit invitation. Examples of the second element, the reactive act of receptiveness, will be discussed in the next section.

4.2.2 Receptiveness by leadership and others

Receptive others support speaking up. Some participants reported examples of receptive leadership. In care home [C5], GCM nurse [R3] experienced open communication with one receptive head of department who supported him and his military colleague, and also agreed on certain arguments they discussed with her. Every two weeks, he also "had a chat with all heads of department . . . to discuss how things proceeded and what should be adjusted. . . . And they really were listening to us, I liked that." GCM nurse [R17] reported on a receptive ICU nurse in his deployment in hospital [H1] with whom he could discuss everything. He was "totally looked after by [this] ICU nurse, you just organised things: I'll do that, you do that, constant feedback".

As suggested in the previous section, the reactive act by leadership to be receptive and listen to team members when they speak up supports speaking up. The importance of this act of listening was discussed by Edmondson (2019), arguing that "the operative word here is "listening"", elaborating on leadership examples of creating "the conditions to make listening and speaking up the norm" (p. 96, parentheses in original). One of these leadership examples referred to fashion designer Eileen Fisher who said "when you don't know and you're really listening intently, people want to help you. They want to share" (Edmondson, 2019, p. 114). Both in psychological safety and safety voice literature, receptiveness (or responsiveness) is often referred to as an act of leadership towards employees or staff (e.g. Curcuruto & Griffin, 2018; Edmondson, 2019; Morrison, 2011; Tucker & Turner, 2014), as shown in both examples in the opening paragraph of this section. "The true test is how leaders respond when people actually do speak up" (Edmondson, 2019, p. 157). In their Safety Voice framework, Noort et al. (2019) broadened this perspective to receptive others within the group. This refers to "a verbal behaviour in which people communicate a concern to others (e.g., colleagues) to change a perceived situation" (p. 385) and to their synthesised safety voice definition (see chapter 2) that safety voice is "addressed to others of equal or senior status" (p. 382). The next examples show that receptive equal status colleagues or staff can also support speaking up, in addition to the afore discussed receptive leadership.

GCM nurse [R3] reported that he confronted care home [C7] staff with an unsafe situation and suggested what might be a safer way of acting. This personnel showed a receptive response instead of resistance,

> Because everyone understood that, and some thought it was a bit strange, then you . . . actually then you talk to them about what the source of contamination is, and then you see that they suddenly think "oh yes, that's it, you're right, yes, we'll do it, so we'll talk to each other about that too".

PHC assistant [R37] was able to speak up and discuss unsafe behaviour by care home [C6] staff, as they were receptive: they "really wanted to learn. In principle, they accepted everything we said, and yeah, their cooperation was fine." PHC assistant [R35], deployed in the same care home [C6] with other military

colleagues, confirmed that the staff was very receptive, enabling him and his colleagues to speak up on issues they were confronted with.

On the other hand, participants also reported others' non-receptive behaviour, both by leadership and by equal status colleagues or staff. In some cases, this appeared to inhibit their speaking up, as they showed reactions of resignation or avoidance, and chose not to speak up anymore. For example, PHC assistant [R37] discussed an example of unsafe behaviour in his first care home [C2]. On the question what he had done with this observation, he answered "well, I . . . I did call out a few, but you just got snapped at and I thought, yeah, suit yourself!". After he explained them why they should not perform such unsafe behaviour, PHC assistant [R37] noticed that they "adjusted it a couple of times, but then you saw it happening again and then . . . then you can keep on being reactive, but if they don't listen, yeah . . . you can't act harshly in that situation". Another example was reported by GCM nurse [R15], as she reflected on the non-receptive attitudes within care home [C1] and the observed effect on (not) speaking up by care home staff: "the local culture was actually: we don't need to address each other, as someone is about to get angry". As a consequence, she observed that the staff chose to remain silent.

Three PHC assistants ([R40], [R42] and [R43]) were deployed in the same subsequent care homes and discussed the differences in receptiveness they had experienced in these two care homes. In their first care home [C3], they perceived that the care home staff was receptive and open to have chats and discussions, showing that receptiveness supports speaking up. In their second care home [C11], care home staff was perceived as non-receptive, as PHC assistant [R43] reported: "Well, yeah, very snappy to each other. [Care home] staff was well-intentioned, but, well . . . yeah, very arrogant, I don't know. Well . . . I suppose this is normal there, so to speak". PHC assistant [R42] characterised these differences in receptiveness between both care homes [C3] and [C11] in her own words: "Yeah, the first site was really great. The second was just shit. I didn't like it." The 7-Item Psychological Safety questionnaires they filled out for both care home deployments showed that on average, all three PHC assistants experienced more psychological safety in care home [C3] than in care home [C11]. According to the psychological safety literature, this illustrates the perceived differences in "a sense of confidence that the team will not embarrass, reject, or punish someone for speaking up" (Edmondson, 1999, p. 354), implying that differences in receptiveness between both care homes negatively influenced psychological safety and as such, speaking up.

These examples confirm previous studies on psychological safety and safety voice: receptiveness supports speaking up and non-receptiveness inhibits speaking up, or makes participants hesitant to speak up. Speaking up is experienced as easier or even nicer when you have receptive colleagues and leadership, as reported by PHC assistant [R42] in the previous paragraph: "The first site was really great". These differences between free and effortless speaking up and hesitancy to speak up were addressed by Edmondson (2003), using a three-point coding scale to assess the ease of speaking up, within which "the atmosphere and interaction in this team is characterized by (3) open reciprocal communication (very free and effortless), or (2) respectful but guarded communication (picking the right moment to speak, pronounced awareness of

power differences), or (1) communication that is quite limited, with some members extremely hesitant to speak up" (pp. 1428-1429). However, contrary to what might be expected from previous studies on psychological safety and safety voice, in most cases of reported non-receptiveness participants apparently did not seem to feel inhibited to speak up. They spoke up, and did not silence their voices, as the next examples illustrate.

GCM nurse [R15] described a situation in care home [C1], as she addressed a (higher-status) physician on non-compliant behaviour to COVID-19 measures (wearing used instead of new surgical masks and suits) when entering another department. The physician exhibited non-receptive behaviour: "I'm the doctor here, who do you think you are?!". However, the GCM nurse continued speaking up and re-addressed the physician: "literally . . . yes, I just laugh and say: "well, that's where the problem is! You're a doctor! You're the brains here, to put it bluntly, and I think it's really bad!"" Another GCM nurse [R17] in this group session reacted on this example, describing a similar situation in another care home [C9]. In this care home, a general rule was issued that there was one central clean room within which no surgical masks and suits were allowed, either new or used, to avoid ambiguity. After issuing this rule, he had to speak up to a (higher-status) physician, who reacted in a non-receptive manner:

> "Sir, I know you're wearing a clean face mask, but you make everyone uncertain if you wander round with a face mask on". [shouting] "And who are you to tell me that I can't wear a mask, if I want to do that I will!"

After this discussion, he addressed the care home management to solve this issue, because "otherwise, they don't listen". PHC assistant [R37] was confronted with non-receptive management in care home [C6], despite the very receptive care home staff, as they "really wanted to learn. In principle, they accepted everything we said, and yeah, their cooperation was fine. Except management, we really had to deal with them. Everybody had to deal with them." PHC assistant [R35], deployed in this care home at the same time, confirmed these statements made by PHC assistant [R37]: the care home staff personnel was very receptive, but when they addressed management, "yeah, at that moment it was their patch" with which the military personnel should not interfere. GCM nurse [R13] reported a quarrel with a manager on his first day in care home [C7]. He discussed his observation of having inappropriate surgical masks and suits: "well, she said I was attacking her, and that I was reacting aggressively, that wasn't the intention. . . . I just get right to the point here. . . . we're not going to work here." Despite the non-receptive manager, he spoke up.

Examples also showed that as a result of continuing to speak up, despite the non-receptiveness, others eventually showed receptive behaviour instead. The examples showed that it took some effort to change non-receptiveness into receptiveness. For example, PHC assistant [R11] reported care home [C7] staff were initially less receptive. Asked for whether this care home staff was able to deal with criticism, she responded "some weren't, no. Some were like, if you said something: "yeah right", but others were more like "oh, is that how it should be?" But in the end they accept it." Referring to the same care home, GCM nurse [R17] he argued that "you have to deal with the [local] mentality, so they have an opinion on anything, they are

not used to be criticised". He elaborated on what supported him to create acceptance for adjusted working methods:

> The how and why . . . being aware of what you are doing . . . The buddy check, that they dare to call each other out, and questioning the nonchalance of the [local] attitude, despite the fact that that's sometimes sensitive. . . . So that penny eventually started to drop, and it took a whole week before we convinced the staff. There are always a few who don't care about the rules, but they were set straight by their own staff in the end.

The examples discussed in this section show that receptiveness supports speaking up: both receptive higher-status leadership and equal-status staff and colleagues make it easier to address issues or ask questions. Although some participants reported that non-receptiveness inhibited or made them hesitant to speak up, in other examples of non-receptiveness, both by leadership and equal status others, participants reported that they actually continued to speak up in order to change the situation: they did not silence their voices. What supported the lower-status PHC assistants and GCM nurses in this research to actually speak up to non-receptive equal and higher status others?

4.2.3 Hierarchy and its familiar structures and expected functional roles

Participants in this research were confronted with unfamiliar higher-status physicians and managers with clearly non-receptive leadership styles. This situation can be characterised as a context within which it is possible that "hierarchy (or, more specifically, the fear it creates when not handled well) reduces psychological safety" (Edmondson, 2019, p. 14). Contrary to what is expected from previous literature (see chapter 2), this study finds that in such a context hierarchy actually supports speaking up in crisis situations. Most participants reported that they only knew an address and a time to appear when they were called upon for deployment (see section 4.1). In this uncertain and ambiguous context, with unknown structures and unfamiliar team members and leadership, they could rely upon their familiar hierarchical structures and functional roles (see section 1.1), as the following examples show.

Due to the amount of both military and civilian medical personnel that together should staff combined ICU teams in hospital [H1], two separate lines (i.e. a military and a civil line) were established in order to support adequate planning and coordination. GCM nurse [R3] reported that he viewed this military structure in hospital [H1] as an advantage, as this enabled him to address the right person: "As it was of course a military structure, that people were walking around, some of them in camouflage suits, sort of, quickly recognisable who you had to address". Other participants also reported that these familiar structures in hospital [H1] supported them to address issues to the appropriate level and persons. GCM nurse [R15] followed the familiar military line as she "went a step higher [on a planning issue], to the second [in command], and then outside my own line to my own platoon commander" in her own original military unit. "Yeah, simply, you just have to take the hierarchical line." GCM nurse [R7] explained that "the civil head of department asked

what was needed, that then was followed by communication towards the military line (warrant officer and major), who communicated with military medical planners. I myself only contacted the medical planners" in the familiar military line. In another hospital ([H8]), GCM nurse [R47] also reported that he followed the familiar hierarchical structure for answering his questions: "yeah, well . . . just search up the ladder, at least, that was the case for me."

This clear top-down hierarchical structure enables a bottom-up clarity on role expectations, as discussed in section 1.1: "if complications arise, everybody "looks" at him/her and now expects him/her to be in charge of the patient" (Hageman et al., 2012, p. 329, parentheses in original). For military personnel, it is a basic principle that the highest commander on scene is expected to take the lead, listen to the advices of his/her personnel and make the appropriate decisions (see section 1.1). This might explain the role-taking behaviour by GCM nurses [R15] and [R3] when they were inviting their team members to speak up (see section 4.2.1). Although they were generally expected to be deployed as an executive team member in a civil ad hoc team (see chapter 3), they acted in accordance with their (familiar) roles during regular military activities: as NCO's, they would lead their own group of assigned personnel (see section 1.1). This role-taking behaviour might even occur implicitly or almost unconsciously, as it is part of the normal way of working within military training and operations, as the following examples show.

GCM nurse [R7] took the expected NCO leadership role to lead a group of lower-ranked team members. In care home [C6], he "was given a coordinating role after his first shift. You fall back on your RMS[3] education: "I am a sergeant, I will deal with it". When actually an issue occurred in this care home, he assessed what was happening and consulted colleagues, inviting them to give their input. He concluded that he "thought it was unacceptable. I say it straight to them: do you want to resolve this together or carry on like this?". GCM nurse [R3] also reported on role expectations in care homes [C5] and [C7]. When he was assigned the role of point of contact (POC) for deployed military personnel, he took his responsibility and spoke up to the higher level. When another person was assigned this role, he spoke up to that person according to follower-role expectations.

> Well . . . yeah, because I, if I had been assigned POC, then I just had my opinion on certain issues and then I said something about it, also because I was sort of the responsible one for a group within the care home . . . and when I wasn't responsible, at least I say something to the person who was appointed as POC, to keep things in the structure. . . . And that's typical military: someone is appointed and then he is the one who takes responsibility.

Participants reported that they also used these familiar hierarchical structures when agreements for deployment of military personnel were not fulfilled by hospitals or care homes. These caveats were provided by the medical planning cell of the Army Territorial Operational Command (the military coordination line), and included that conditions (i.e. specific procedures and protocols) were in place for deployed military

[3] The Dutch Army Royal Military School (RMS) provides the initial education for junior NCO's.

personnel to work safely within the COVID-19 context. With these caveats, military personnel were empowered to address civil management on unsafe situations and discuss the potential consequence of retrieving military personnel from a hospital or care home. If they did not succeed to convince management to adapt the situation, then they followed familiar military hierarchical lines (i.e. TOC medical planning cell) to report this issue.

GCM nurse [R3] reported a situation in care home [C5] on adjusting structure and scheduling personnel to enhance safe and adequate working conditions:

> If I didn't succeed within the department, I went to the head of department, and then he should resolve it, and when he at a certain point also says, "yeah, but that's not the way we will do this", then I will contact my own defence line to say that they won't listen, and then we would have been pulled out very quickly. So we did have a sort of dominant position: "look, you listen to us, or we'll leave and you can sort it out yourselves".

GCM nurse [R17] encountered an unsafe situation for deployment in care home [C9], addressed management and reported to their own military management that sent specialist support:

> That was also the requirement from Defence: it has to be safe for our personnel so that they don't drop out, as a military organisation . . . Well, turned out not to be the case. . . . Everybody out, we flagged it up. . . . Luckily a call had already gone out from our [military] management that a HPM[4] specialist needed to come straight away. This specialist had nothing good to say about it and literally said to get a second HPM specialist in, they don't say that very often, and then there was a bit of a quick discussion with management that things had to change very quickly, because otherwise Defence would pull out. In the end, they turned, and we were able to get back to work.

GCM nurse [R15] also asked the military line for this specialist support when she was confronted with counterproductive behaviour in care home [C1]:

> For example the 'yes, but', and that we had to engage the HPM specialist by our military line, and that the military line even had to engage the MHS[5], and we had discussion after discussion, and that we also had to involve our military line in the conversation to get aligned.

PHC assistants [R41] and [R37], deployed in care homes [C3] respectively [C2], confirmed that previous established arrangements empowered them to speak up to the care home management "at times when things went differently, or when things didn't go at all as you expected them to". PHC assistant [R35] reported that "we also experienced . . . being scheduled on our own. We just argued against it, like: this was not

[4] Military specialist on Hygiene and Preventive Medicine (HPM)
[5] Municipal Health Service

agreed upon, you just organise someone." Asked for if this was well received by management, he answered "I don't know . . . It wasn't the arrangement, so, well . . .", so he addressed the issue.

Another example related to a request by care home [C1] management for extension of the military support. Feeling supported and empowered by the general caveat for military support ("Yes, fine, we'll do that, but we'll do it from this point of view"), GCM nurse [R18] "could be really critical towards the management. And really hold up a good mirror." GCM nurse [R7] reflected on the position the military personnel had, with the caveats given by the military organisation empowering them to speak up, compared to the position of care home [C6] staff. He referred to their individually perceived fear for consequences of speaking up: "People kept quiet. They've got a job, and might be afraid of losing it. Or losing face. Soldiers are in a unique position, though: I could look at it from a distance, and I said what I thought."

Although these examples show the supporting role of familiar hierarchical structures and functional roles for speaking up in this specific crisis context, one participant reported a situation in hospital [H1] that showed that hierarchy might negatively influence speaking up from an implicit belief that voice can be risky in social hierarchies (e.g. Detert & Edmondson, 2011; Milliken et al., 2003; Morrison & Milliken, 2000). Although PHC assistant [R11] mentioned that at some point in time hierarchical interrelations had disappeared, the caution for speaking up within the hierarchy was still present in her (implicit) beliefs when she addressed a person higher in the medical hierarchy:

> Everyone was concerned with each other, ranks and positions didn't count any more. You kept in in the back of your mind, of course. . . . Yes, but I know my place . . . I'm not going to do anything stupid. If I want to do anything or know anything, or if I want to see anything, I just ask politely, and if people are talking, I'll wait… It's still in the back of my mind, this is still Defence . . . that's drummed in . . .

These examples show how participants were able and empowered to use their familiar military hierarchical structures and familiar functional roles to address issues. These examples also are closely related with an aspect discussed earlier (see section 4.2.1), i.e., being invited by the military organisation to speak up when caveats for safe deployment were not fulfilled and it was necessary to escalate issues. This might also be an example of enabling institutional structures and resources, included in the Safety Voice framework (Noort et al., 2019). Even when confronted with unfamiliar higher-status physicians and managers with clearly non-receptive leadership styles, participants spoke up, feeling empowered by their familiar military hierarchical structures, and using functional roles that follow from it.

4.2.4 Team membership stability

In the COVID-19 crisis context studied in this thesis research, military personnel were placed in unfamiliar ad hoc teams with unfamiliar leadership, as was discussed in previous sections. Moreover, due to uncertainty

and changes in team composition, ad hoc teams were not stable during the deployment. For example, GCM nurse [R17] reported in care home [C9]:

> Yeah, we also had another problem, as we had continuously other people working in there, and those people sent by an employment agency. . . . Every time again we had to wait and see in the morning, how many will arrive today, because you knew, there are five on the schedule, but maybe only two appeared, because of course they heard that there was the COVID virus, and then they just didn't come. They just didn't appear! . . . Continuously, every day it was a surprise: who appears today?

In her study on learning in interdisciplinary action teams, Edmondson (2003) stated that familiar groups or stable subsets of team members who know each other well and work closely together, "were more able to initiate opportunities to reflect out loud on the task and change direction" (p. 1426; referring to Okhuysen (2001)). Thus, team membership stability, i.e. the "degree to which membership of the team is consistent over time" (Edmondson, 2003, p. 1430) supports team members to speak up and discuss observations, questions and concerns in order to learn and improve performance. This principle is also used in military training and preparation for missions abroad with fixed stable teams in order to create this team membership stability. Edmondson (2003) also described how action teams in for example health care might face a certain degree of member instability: "such teams tend to draw from a larger pool of members to put together a subset of members at a given point in time, due to the need for around the clock operations or the potential for exhaustion that action teams face" (p. 1425). This reflects the situation described above by GCM nurse [R17] and implies that this team membership instability would inhibit speaking up. The following examples show how participants coped with this situation and nevertheless tried to create team membership stability, supporting speaking up.

GCM nurse [R3] reported that it was helpful for him to speak up to familiar people within the military hierarchical structure in hospital [H1], as his own regular unit leadership was acting within that structure:

> In fact, as I know these people, my own captain, own sergeant major, and that makes it easier to communicate with each other, and if, so to speak, it would have been people in another unit, I don't know if it would be that easy as it was now.

This example closely relates to familiar hierarchical structures, discussed in the previous section. In this case, he looked for familiar people within these structures. He also reported that he felt more supported to speak up as he got familiar with unknown team members, as he always did have "just his own patient, and worked with the same civil ICU nurse" in subsequent shifts, implying a stable – although small – team membership. Or, as Edmondson (2003) stated, "a stable subset of team members" (p. 1426). PHC assistant [R11] also argued that it took some time to get to know initially unfamiliar runners in hospital [H1], enabling them to speak up to each other: "At a certain point things went well, but initially, of course people are wondering about who are you, what can I say to you, and cannot?" In the end, they had a smartphone app group within which they shared concerns and ideas. In this "joint app, you could raise issues, what didn't work that well,

or ideas or . . .", that apparently was a desirable and satisfactory contemporary tool for speaking up. PHC assistants [R40] and [R43] also reported that it could take some time to get familiar with the care home [C3] staff. They confirmed that they were fully integrated in a stable team and had experienced that they knew when and how to speak up. However, it took them approximately one week to get familiarised with the team. Thus, participants argued that they could speak up by building stable (subset) team membership relations within this context with ad hoc teams, in order to get familiarised and speak up to each other.

This principle of stable subsets of team members in ad hoc contexts refers to a specific concept that is used in military organisations for stable team membership in uncertain and ambiguous situations: the military 'buddy-team system'. Military personnel are familiar with this system of creating smaller and stable one-to-one sub-teams, that is used during deployment in mission areas abroad, but is also useful in other contexts, such as this COVID-19 crisis support operation. Some participants referred to this buddy-team system.

GCM nurse [R15] asked the military planning cell in hospital [H1] if they could apply the buddy-team system when scheduling shifts:

> I brought it up in the planning, "gosh, couldn't I work with my close colleague? Because I've got various reasons for that, as stated in a [temporary battalion order] about a buddy system . . . is it permissible? Possible? I would prefer it. . . . Well, we said then there should be at least one person as a buddy, so that you at least know, the two of you can talk to each other, "what's going on, it's quite stressful, because it IS stressful". I found it stressful.

This example shows that this concept was even included in military orders (temporary battalion order) for this deployment. She confirmed that this buddy-team system enabled speaking up to a well-known colleague, in case of tense moments during her deployment. GCM nurse [R17] confirmed the importance of having a stable buddy-system to be able to create team membership stability in a context of continuously changing team compositions in hospital [H1], supporting him to speak up:

> And if you were lucky, you just had the same ICU nurse every time . . . I was lucky, fortunately . . . but not you [GCM nurse [R15]], for example. And then a buddy system is really important, I saw that coming with [colleague's name] at the time. We had actually said beforehand: "whatever happens . . . please put us on the same shift so that we're together at least, yeah, then you can discuss things, we like that." They took that on board and in the end, apart from one or two shifts, we worked constantly in buddy pairs there. And that worked really well. . . . You can talk to each other as buddies if you see something that isn't quite right.

Finally, GCM nurse [R18] referred to the buddy-team system when discussing his deployment in hospital [H1] with ad hoc ICU team compositions. "There were too many changes for me to say that I was really working in a team. . . . At best you have your buddy, like [R17], who you often work with and form a team."

He confirmed that it could be helpful in creating stable subsets of team members, and as such, enable members to speak up and discuss issues together.

These examples show that participants faced a certain degree of team membership instability, as described by Edmondson (2003) earlier in this section. As action teams might face a certain degree of membership instability, she suggested another aspect that might support the ease of speaking up in these teams: team preparation. "Being able to speak up in a practice context made it easier to do so later, in the real operating room setting" (p. 1436). Although some participants reported that they felt comfortable that they had a short introduction program in some hospitals and care homes as preparation for their deployment, they did not report that this supported them to speak up. This might have been the result of not having the (expected) team leader conducting this preparation: these hospitals and care homes had a general introduction with small groups of new administered personnel, without the effect of "inclusiveness and thoroughness of a dry-run practice session" (p. 1448) with the expected team members.

The examples discussed above show that as the degree of team membership stability is higher, i.e. more consistent over time, for example by scheduling subsequent shifts with the same ICU team members, they felt supported to speak up. Participants also reported that when team membership instability occurred in ad hoc teams, they relied on the stability of smaller sub-teams, the buddy-teams, supporting them to speak up to each other.

4.2.5 Individual perceptions of (potential) health or safety threats

A final aspect, extracted from participants reports, that supports speaking up is the individual perception of a (potential) health or safety threat. The Safety Voice framework (Noort et al., 2019) specifically includes hazard-related antecedents, as "safety voice involves raising a safety concern in response to a perceived hazard" (p. 384). In their definition for safety voice (see chapter 2) they included the notion that safety voice is "aimed at improving a perceived unsafe situation" (p. 382). As such, the Safety Voice framework includes both the question whether or not a hazard is noticed and an evaluation of a perceived risk (high impact/likelihood of harm).

In the national support operation context of this thesis research, participants were confronted with the COVID-19 virus hazard (see section 4.1). Although participants perceived this hazard and the risk of being infected, most of them actually took mitigating measures to cope with this hazard or risk. They were aware that these self-protecting measures would be effective, because of their military training and/or experience. GCM [R7] nurse described:

> It is all about the details: I was aware of that, they [care home [C6] staff] weren't . . . As a military, you are trained in CBRN[6], that creates a certain mindset. In Mali, I also had a course on the EBOLA virus, wearing double protective gloves, and stuff like that.

Two other participants also referred specifically to this element of military training: "the mindset. . . the basic issue is, as is the case with CBRN, that you ensure your own safety" (GCM nurse [R17]) and "the first time you enter [hospital [H1]] . . . you do everything correctly into each detail, ensuring not to be infected, the same as when you are attacked by a CBRN agent" (GCM nurse [R3]).

When participants perceived that they could be exposed to the virus and thereby were at risk to be infected by the virus due to insufficient countermeasures, they spoke up to either the hospital and care home management or their own military line (see section 4.2.3). This was a caveat by the defence organisation for deployment in hospitals and care homes in order to protect military personnel. These examples relate to participants' individual safety, but also to the safety of their colleagues, hospital or care home staff, and patients of hospitals or inhabitants care homes. This might suggest that a combination of both available and familiar hierarchical structures (see section 4.2.3) and a perceived health or safety risk supports or empowers speaking up, supporting the notion of interacting safety voice variables as proposed in the Safety Voice framework (Noort et al., 2019).

In addition to the COVID-19 virus hazard, participants reported perceived incompetency (i.e. doubts of being competent enough to conduct the required tasks) as a potential health and safety risk for patients in hospitals or inhabitants of care homes. GCM nurse [R17] reported a situation in hospital [H1], with a perceived potential risk of administering wrong medication, an act (or error) that could turn out to be very dangerous for patients, in combination with reduced availability of experienced and trained medical personnel:

> You hear that there is an ICU nurse shortage. We already heard: "it is possible that you will work with an anaesthetist, maybe even someone who is already retired for some years". At that moment I thought: "I'll end up to be the one who must turn those knobs that I actually don't master . . . with ventilation equipment with all kinds of fancy medication". . . . Well, at the time, I think, I'll wait and see and raise the alarm when I think it's not right. Like: "if I have to do stuff I'm not supposed to do". . . . that I have the feeling I could end up in a situation I don't know how to deal with, where I have no backup either. I don't want to have that feeling, I discussed that with my colleague too, and vice versa.

PHC assistant [R11] also spoke up on her doubts. She discussed that she had to be cautious that others asked too much of her when conducting certain medical tasks in hospital [H1]:

[6] Chemical, Biological, Radiological, and Nuclear

> You had to ask yourself am I capable of that or not. And if not, you just have to set your boundaries. . . . I'm pretty good at that really. I'm outspoken enough to say "sorry, but I daren't do this, because it's years since I did this procedure".

Both participants perceived their own competence not to be adequate enough to perform the required tasks, and saw that as a potential threat for patient safety as errors might occur. These examples seem to be contrary to expectations for speaking up when you feel incompetent to perform your tasks. For example, Sutcliffe, Lewton, and Rosenthal (2004, referred to by Okuyama et al., 2014) reported that lower-status health professionals hesitated to speak up to their supervisors when they had concerns on appearing incompetent in certain situations related to patient safety. Implicitly, these examples also refer to a sense of responsibility for patient safety. This was stated explicitly by GCM nurse [R15], as she answered the question what supported her to speak up: "Safety! Oh yes, I really felt responsible . . . we're doing it for the safety of the patients!" She discussed a situation in hospital [H1] within which she felt responsible for patient safety as she questioned another nurse's competence to perform specific medical tasks. GCM nurse [R15] replied on this nurse's argument that, although she was not trained for that task, had a brief instruction by an ICU-nurse in between other things:

> Yes, I just went up to the person: "what are you doing?" (…) You're a nurse, in my opinion you have to draw a line in that respect, because if that procedure goes wrong – of course it always goes right – but if it does go wrong, you're screwed!

These examples illustrate that the individual perceptions of a (potential) health or safety risk supports speaking up. Moreover, the examples discussed above and in section 4.2.3 show how several antecedents within the Safety Voice framework (Noort et al., 2019) interacted and supported participants to speak up: the perception of a potential health or safety risk (hazard-related antecedent) interacts with 'felt responsibility' and 'subject expertise' (individual motivational and safety knowledge antecedents), 'others are fallible' (group shared safety knowledge) and 'enabling structures and resources' (institutional structures).

5 CONCLUSIONS AND PRACTICAL IMPLICATIONS

The goal of this research is to provide insight into aspects that support military team members to speak up in unfamiliar, ad hoc composed teams in peacetime (non-hostile) national crisis support operations. For this purpose, this research was conducted in the context of the COVID-19 crisis support operation in the Netherlands between March and July 2020. With a short notice to move, military medical personnel were deployed in civil hospitals and care homes within unfamiliar civil structures and ad hoc teams, as they faced the threat of the infectious COVID-19 virus. Participants' reports were analysed using an iterative, abductive process to both extract aspects or themes from the transcripts that supported (or inhibited) speaking up, and find relevant explanations or further elaboration, using the aspects identified in previous literature on psychological safety and safety voice.

Results show that supportive and receptive leadership behaviour and relationships with other team members, as suggested by previous literature, supported speaking up. Participants reported that leadership invitation to speak up and leadership and others' receptiveness to speaking up supported them to speak up. These results imply that in crisis situations, such as during the COVID-19 crisis, it is important for both higher-status leadership and equal-status team members to invite team members to speak up, but perhaps more important, to be receptive and really listen to each other: "The true test is how leaders respond when people actually do speak up" (Edmondson, 2019, p. 157).

The importance of relationships with other team members was also found in team membership stability that supported participants to speak up. Participants reported many changes in team composition, thereby reducing team membership stability. They relied on the stability of smaller sub-teams, i.e. the familiar military buddy-team system, that supported them to speak up to each other. Moreover, they illustrated that when team membership stability is more consistent over time, for example by scheduling subsequent shifts with the same ICU team members, they also felt supported to speak up. This suggests that creating team membership stability through (even one-on-one) consistent scheduling shifts with the same team members, is an important aspect for future national crisis support operations in order to support (military) personnel to speak up.

Participants did not specifically report that the aspect of team preparation (i.e. a 'dry run'), as proposed by Edmondson (2003), supported them to speak up. As was discussed in section 4.1, team compositions, including team leadership, appeared to have changed too frequently to support this team preparation with expected team members and leadership. Some participants reported that they only had a general introduction as they entered the facilities. Following Edmondson's (2003) arguments, this would suggest that in order to support speaking up in crisis contexts, it is recommended to have clarity on team leadership as soon as possible.

This might also be a clarification for the reports by participants on hierarchy. Military leadership in hierarchically organised unit structures is a basic premise for conducting military operations in uncertain

and ambiguous (mission) environments (see section 1.1). Contrary to the prevailing view in previous research, both in psychological safety and safety voice, hierarchy appeared to support team members to speak up in this COVID-19 crisis context. It seems that in these uncertain and ambiguous crisis situations, including team composition and team leadership, prevailing and familiar hierarchical structures might provide this clarity and as such, support military medical personnel to speak up, as one knows the pathways for addressing the correct message to the appropriate level. Although previous literature suggested that organisational support (enabling resources and structures) enables speaking up, this organisational support is supposed to be available within the organisation concerned, in this case the hospitals and/or care homes. However, this research showed that that the enabling structures were facilitated by the military organisation, as a sort of backup or 'emergency cord' via the military line when military medical personal were confronted with certain situations of non-receptiveness or non-compliance with caveats. Even when confronted with unfamiliar higher-status physicians and managers with clearly non-receptive leadership styles, participants spoke up, feeling empowered by their familiar military hierarchical structures, and using functional roles that follow from it. This aspect included the perceived self-confidence from previous literature, with participants relying on familiar and self-evident functional roles that empowered them to speak up. These expectations were also discussed earlier by Hageman et al. (2012), and are viewed as a normal way of working within the military organisation. This thesis research shows that in such crisis contexts, the regular military (fixed) unit training with familiar structures and functional (leadership) roles might be a valuable resource for sharing concerns, asking questions and providing ideas regarding the safety of patients and/or care home residents, civil and/or military colleagues, or themselves.

This perceived risk or hazard is also an important aspect that supported participants to speak up. First, they perceived potential health or safety threats (i.e. COVID-19 infection) to patients and/or care home residents, civil and/or military colleagues, or to themselves, supporting them to speak. Moreover, this aspect relates to the invitation by the military organisation to speak up when caveats for safe deployment were not fulfilled and it was necessary to escalate issues. Second, this perceived health or safety threat was also related to felt responsibility and perceived personal competence: participants spoke up when they had doubts on their competence for conducting the required task, as this could result in errors and thus create a risk for patient safety within this COVID-19 crisis context.

This research was limited to the context of a military support operation during the COVID-19 crisis in the Netherlands in the first half of 2020. Although this might constrain the conclusions to this specific operation, this research provides insight into aspects that support members of a military hierarchical organisation to speak up in these unfamiliar, ad hoc composed teams in a peacetime (non-hostile) national crisis support operation. Another limitation of this research is the post-hoc nature of studying these deployments. The military support ended in the beginning of July 2020, and the interviews and groups sessions in this thesis research took place almost three months later. In this period, participants had the possibility to recuperate from this intense period of supporting (health)care homes. Moreover, halfway the month of August, regular unit training and exercises had started again, including (for some of them)

additional education in preparation for a possible deployment due to a second wave of COVID-19 infections in the Netherlands. These activities might have influenced participants' perceptions of their deployment. Also, as discussed in the methods section, scientifically it would have been preferable to use an in-situ observational method. However, this was not possible due to highly contagious COVID-19 context.

A final limitation in this research are possible selection biases. First, as the defence organisation applies a selection procedure with a focus on – among other aspects – mental resilience, leadership (only for leadership positions) and communication skills (Ministry of Defence, 2021c), there might be a selection bias in the military population. These aspects might support military personnel to speak up in their work. Second, the participants in this thesis research were military medical personnel, who have been trained in recognising aspects concerning patient safety. This might have supported them to speak up on issues of patient safety, compared to other military, non-medical disciplines. This latter selection bias was also found in literature: Noort et al. (2019) concluded that "an industry-bias exists towards research in healthcare" (p. 379) in safety voice literature. Future research within other (military) disciplines (e.g. infantry, engineers) should provide more insight on whether the aspects found in this thesis research also exist in these other disciplines during national crisis support operations.

In their work, military personnel will face risks and threats: during deployments in ambiguous high risk mission contexts abroad, but also in peacetime in the Netherlands during training programs and exercises or national support operations. In all these contexts, it is crucial that team members speak up: sharing concerns, asking questions and providing ideas supports effective team decision making for coping with risks and threats, and in extremis can make the difference between life and death. The insights from this research may not only be useful for the military organisation to facilitate speaking up in other military disciplines and in military deployments in other national crisis support operations. They may even translate to other industries that are characterised by formal hierarchies and operate in crisis situations. As within the two main bodies of literature on speaking up (i.e. psychological safety and safety voice) very little studies have been published on speaking up in military organisations, this thesis research might also contribute to fill this gap in research.

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ABBREVIATIONS

CBRN	Chemical, Biological, Radiological and Nuclear
COVID-19	Coronavirus Disease 2019
GCM nurse	General Care Military nurse
HPM	Hygiene and Preventive Medicine
ICU	Intensive Care Unit
MHS	Municipal Health Service
NCO	Non-Commissioned Officer
PHC	Personal Healthcare
RCDS	Review Committee Defence and Safety
RMS	Royal Military School
RNLA	Royal Netherlands' Army

APPENDICES

Appendix A. The interview / group session protocol

Welcome speech for participant(s).

- The aim of this welcome speech is to create an open context for discussion and free flow of information, despite existing rank differences. Participants are troops (rank: private, corporal) and/or non-commissioned officers (NCO's, rank: sergeant, sergeant major), the researcher is officer (rank: lieutenant colonel). Within the military hierarchical system, these ranks concern large status differences. The researcher aims to reduce these differences.

General introduction of the research:

- The informed consent (see Appendix B) was sent to participants beforehand
- The researcher explains the research, according to the topics mentioned in the informed consent: aim of the research, topic of the research, voluntary basis, handling of research data (recordings and transcripts), and anonymity.
- Participants are asked if they have any questions on the informed consent, and are asked to hand over the signed informed consent form.
- Explanation of the interview / group session: approximately one hour, with general questions for an open discussion of participants' experiences, and filling out of the questionnaire, including the deployments in subsequent hospitals and/or care homes.
- Check participants' information on deployments (locations, periods) and background (age, tenure).

Guiding questions:

- How did the preparation / execution of your deployment come about?
- Was it clear what you were expected to do when deployed?
- Did you have concerns, questions or ideas during the preparation/execution of your deployment?
- Did you perceive a hazard or risky situation during the preparation/execution of your deployment?

Supplementary / follow-up questions:

- Could you further elaborate on that?
- What did you do with these concerns, questions or ideas?
- What supported you to speak up?

Questionnaire:

- After discussing each location of deployment, participants were asked to fill out the 7-Item Psychological Safety questionnaire (Edmondson, 1999), with the team for that specific location in mind. This follows Newman's et al. (2017, p. 524) recommendation to use this scale "as the measure of choice for use in future studies in preference to proxy or "in-house" measures of psychological safety".
- A Dutch translation of the 7-Item Psychological Safety questionnaire (see also Jansen, 2011; Rupert & Jehn, 2008) was used in this thesis research:
    1. Wanneer je binnen dit team een fout maakt, wordt dit vaak tegen je gebruikt (R).

2. Leden van dit team zijn in staat om problemen en moeilijke onderwerpen naar voren te brengen.
3. Mensen in dit team wijzen anderen soms af omdat ze anders zijn (R).
4. Het is veilig om in dit team risico's te nemen.
5. Het is moeilijk om andere leden van dit team om hulp te vragen (R).
6. Niemand van dit team zou opzettelijk handelen op een manier die mijn inzet ondermijnt.
7. Tijdens het werken met leden van dit team worden mijn unieke vaardigheden en talenten gewaardeerd en gebruikt.

- The original 7-point scale from "very inaccurate" to "very accurate" was translated in "helemaal mee oneens" to "helemaal mee eens". Questions 1, 3 and 5 are reverse (R) coded.

Specific topics:

- Did you, in hindsight on both locations, feel integrated into the hospital and/or care home teams? This refers to the time needed for development of psychological safety, as discussed in literature.
- What was your position or status within the team, and the hospital/care home organisation? How did you experience this position related to speaking up?

Closure:

- Ask if participants have any questions.
- Repeat the next steps in this research.
- Thank participants for their contribution to this research.

Appendix B. Research ethics and informed consent

The ethical considerations for participants in this thesis research are guided by the guidelines of Lund University for research ethics and integrity. It concerns the way the researcher conducts the research in a careful and appropriate way, including the way data is collected (e.g. informed consent), stored and used (including publication in the final thesis), the treatment of the information disclosed by participants, and (open) access to research data.

In order to maintain confidentiality, the participants received the informed consent form (see Figure 1) before the interview or group session, providing information on the research (e.g. research purpose, data collection, voluntary participation). At the first contact, and at the start of the interview or group session (see interview protocol in Appendix A), participants are informed on the research, and asked to give their written consent (signed informed consent form).

Numerical codes are used to anonymise individual participants, deployment locations and original units. Only the researcher has access to a (password protected) overview of codes that was deleted after finalising this thesis research. All information that might identify an participant was removed from the interview transcripts.

Verklaring bekendheid met onderzoeksinformatie

Doel van het onderzoek
C-LAS heeft het tijdens de COVID-crisis meerdere keren uitgesproken: als je vragen of zorgen hebt over de inzet, stap dan naar je commandant. Al eerder heeft voormalig C-LAS en CDS, generaal Van Uhm, vergelijkbare uitspraken gedaan. Generaals geven dit aan, maar werkt het dan ook zo? Uiten militairen ook echt hun zorgen, twijfels of vragen? Komen ze met voorstellen en ideeën? En wat helpt ze om op die momenten hun vinger op te steken?

Onderwerp van het onderzoek
Om beter inzicht te krijgen in de mate waarin (manier waarop, redenen waarom) militairen hun zorgen of vragen uitspreken, richt dit onderzoek zich op de vraag over de wijze waarop dit wel of niet plaatsvond tijdens de inzet in ziekenhuizen en verpleeg-/verzorgingstehuizen tijdens de COVID-crisis in Nederland.

Deelname onderzoek
- De deelname is vrijwillig. Ook tijdens het onderzoek zelf kun je op ieder moment je deelname stoppen. Dit kan zonder opgave van reden.
- Lkol R.C. (Renzo) Versteeg is aanspreekpunt en uitvoerder van het onderzoek; bij vragen, ook na deelname aan het onderzoek, kun je een mail sturen naar RC.Versteeg.02@mindef.nl.
- De informatie van het onderzoek wordt geanonimiseerd verwerkt, wat betekent dat codes worden gebruikt voor de namen van de deelnemers, hun eenheden en de instellingen waar gewerkt is (bijv.: deelnemer 1, van eenheid C, in ziekenhuis Z2 en verpleeg-/verzorgingstehuis V1). Als achtergrondgegevens worden gebruikt de rangcategorie (kpl/kpl1, sgt1/sm of lnt/kap) en (voor COVID) de functie (VIG, Vplk/AMV of AMA). Leeftijd, geslacht en duur bij defensie/bij de eenheid worden alleen gebruikt om de achtergrondgegevens voor de onderzoeksgroep weer te geven. Je zal dus als individu niet terug te herleiden zijn naar specifieke onderzoeksdata.
- De sleutel (codes naar personen i.v.m. contactgegevens) heeft alleen Lkol Versteeg in beheer (beveiligd met wachtwoord); deze wordt na het onderzoek vernietigd. Voor het eventueel na afloop versturen van een kopie van het eindresultaat onderzoek (zie hieronder) wordt deze ondertekende verklaring gebruikt.
- Uitspraken uit het onderzoek (tekstdelen van de verslagen) kunnen geanonimiseerd worden gebruikt in de scriptie of eventueel wetenschappelijk publicatie om resultaten te verduidelijken. Indien gewenst ontvang je een kopie van deze ondertekende verklaring.
- Dit onderzoek volgt de richtlijnen voor scriptie onderzoeken van de Universiteit van Lund in Zweden en eventueel de richtlijnen voor wetenschappelijke publicaties.
- De gemaakte audio opnames worden gebruikt voor de verslaglegging van gesprekken (uitgeschreven tekst in een transcript of verslag). Na het afronden van het onderzoek en de scriptie (begin 2021) worden de audio opnames vernietigd, net als eventuele papieren versies van de verslagen. De digitale versies van de (geanonimiseerde) verslagen worden beveiligd met een wachtwoord en bewaard voor een standaard periode van zeven jaar. Ook hierin zal je dus als individu niet terug te herleiden zal zijn naar specifieke onderzoeksdata.

Naam deelnemer _____

Datum _____

Akkoord met audio opname (aankruisen) Ja Nee

Eventueel mail adres voor een kopie van het eindresultaat van het onderzoek

_____

Handtekening _____

Figure 1. Dutch Informed Consent Form

For me as an insider in the military organization, I considered some specific aspects of conducting research within my own organization. First, I might be biased when analysing the research data. This issue was coped with by using the Lund supervision system for guiding thesis research and by reflecting with (military and

civil) colleagues. Second, as I am a higher-ranked RNLA officer within a hierarchical military organization, the lower-ranked participants might consider not to communicate personal or delicate information in the interviews and group sessions. As such, valuable information on contributing factors for psychological safety might not be identified. This issue was coped with by specifically addressing this issue in the welcome speech at the start of the interview or group session (see interview protocol in Appendix A), and by visible acts in order to reduce status or power differences (e.g. visiting participants' work location for conducting interview / group session, wearing the same military clothes as participants, sitting at the same physical level (chairs) as participants).

Appendix C. The selection process and background information

In July 2020, after ending the support for the COVID-19 crisis (Ministry of Defence, 2020h), a representative of the military coordination cell, responsible for planning deployments during the COVID-19 crisis support operation, was asked for an overview of RNLA military medical personnel in order to select participants for this thesis research. In order to enable participants to make comparisons between locations of deployment, a specific request was made for military personnel that were deployed at least at two locations. This request resulted in a list of 46 persons. All four RNLA medical units were included, as were the three levels of medical personnel: 20 personal healthcare assistants (PHC assistant), 23 military nurses responsible for general care (GCM nurse[7]), and three military physicians. For this thesis research, a selection of PHC assistants and GCM nurses was made, as it was expected that they would be executive members of civil ad hoc teams during their deployment and would follow the instructions and orders of civil leadership or authorities (e.g. ICU nurses, care home team leaders), and as they represented four RNLA medical units. The three physicians were not selected, as it was expected that they would have more individual care tasks (e.g. individual patient consultations) to be performed, instead of working as an executive member within a team. The selection criteria used were, if possible, (1) participants from all four RNLA medical units, (2) groups of participants from the same unit deployed in the same hospital or care home, and (3) both PHC assistants and GCM nurses.

After selecting 25 participants, they were contacted via their unit commanders, as these commanders had to allow their personnel to participate in these interviews and group sessions during their normal duty hours (earlier, the RNLA deputy commander had given his approval for conducting this thesis research). As participation was voluntary, and participation had to fit in their exercise schedules and external internships, the final group consisted of 14 participants. As one participant signed out just before a scheduled group session, his platoon commander asked a volunteer in the same unit to join in. This participant was not on

[7] General Care Military nurse.

the initial list, as he was deployed only once. The final composition of the group of participants is depicted in Table 1.

The group of participants was predominantly male (11 participants) and on average almost 30 years of age. Except for one participant, each participant was deployed in two or three hospitals and/or care homes. The maximum total deployment period was approximately three months, interrupted by one or two short periods of recuperation and preparation for the subsequent hospital or care home deployment.

The data collection was conducted in the final week of September 2020 and the first weeks of October 2020 in three individual interviews and two group sessions. Two individual interviews were conducted by telephone, the remaining interview and both group sessions were conducted at the separate units' locations in the Netherlands. All but one interviews and group sessions were recorded; one individual interview by telephone was recorded by handwritten notes.

Table 1

Participants' Roles, Participation in Interview or Group Sessions, Original Units, and Locations and Duration of Deployments

				Location 1		Location 2		Location 3	
Participant / Respondent	PHC / GCM*	Interview / group session	Unit code**	Code**	Days	Code**	Days	Code**	Days
R3	GCM	INT3	A	H1	28	C5	22	C7	18
R7	GCM	INT2	A	H1	28	C6	11	C10	4
R11	PHC	INT1	B	H1	32	C7	18		
R13	GCM	GS2	C	H1	28	C7	21		
R15	GCM	GS1	D	H1	28	C1	33		
R17	GCM	GS1	D	H1	28	C9	27		
R18	GCM	GS1	D	H1	21	C1	12		
R35	PHC	GS2	C	C2	18	C6	15		
R37	PHC	GS2	C	C2	18	C6	15		
R40	PHC	GS2	C	C3	29	C11	17		
R41	PHC	GS2	C	C3	29	C1	19		
R42	PHC	GS2	C	C3	29	C11	17		
R43	PHC	GS2	C	C3	29	C11	17		
R47	GCM	GS2	C	H8	-***				

* Personal HealthCare assistant / General Care Military nurse

** Units, hospitals and care homes were coded to ensure anonymity

*** Unknown