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## **Collaborative Team Decision-Making in a Realistic CF Training Scenario**

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## Abstract

As part of a Canadian Forces (CF) pre-deployment training course, military personnel participate in several realistic training exercises. One such exercise simulates a human rights violation. In this scenario, unarmed trainees encounter armed police (a sergeant and constable) verbally and physically abusing two civilians and forcing them to dig what could be their own graves. The civilians plead for their lives, continuously declaring their innocence and imminent death should the trainees leave. The trainees are kept at a distance (approximately 60 feet) from the two civilians by the lead police officer, the sergeant (Sgt). Trainee teams led by a designated team leader and consisting of 2 to 4 members must negotiate with him only. Team members observe the proceedings between the Sgt and the team leader, providing few opportunities to collaborate with their team. Trainees are challenged to use the negotiation skills they have learned to fulfil their mission mandate, and to advocate for the fair treatment of the civilians to promote a successful resolution for all parties.

The current study was initiated in response to the findings of two previous two studies (Thomson & Adams, 2007; Thomson, Adams, & Waldherr, 2008), in which team members have shown significantly more motivation to redo the scenario than team leaders. One possible explanation for this finding was that team members were not able to provide adequate input into the negotiation because the team leaders controlled the negotiation with the Sgt. Consequently, team members may not have been able to share ideas they generated over the course of the negotiation. To explore these issues, this experiment attempted to promote higher levels of teamwork during the negotiation by either prompting the trainee teams to “work as a team” (experimental condition) or not prompting them (baseline condition) immediately before providing the opportunity for an impromptu team huddle.

Although the experimental manipulation did not seem to promote higher levels of teamwork, allowing teams time to collaborate during the negotiation did have a number of impacts. During the negotiation (but excluding ‘team huddles’), several team behaviours including correcting team members’ errors and sharing and pursuing mission goals were particularly prominent. Within the team huddles, moreover, teams in both the experimental and baseline conditions took the opportunity to collaborate when it was provided. For example, all teams readily exchanged information, managed roles, and backed each other up, especially in multinational teams, whose leader was from a foreign country. Importantly, the majority of teams also used the huddle late in the negotiation to collaborate on the decision that the team needed to make (i.e., to leave, watch or follow the civilians) as the scenario drew to a close.

However, trainees’ perceptions of their own input during team huddle discussions and contribution to the negotiation suggested that team members were still less satisfied with their role than team leaders. They reported having had significantly less input during these discussions than did team leaders, and reported that their ideas were less valued and less used during the negotiation. In accordance with previous studies, they were marginally more motivated than leaders to redo the scenario if provided the opportunity. Some of the possible reasons behind this apparent disconnect are discussed. Implications for training and research are discussed.

# Résumé

Préalablement à un déploiement, le personnel militaire des FC participe à plusieurs exercices d'entraînement réalistes. L'un d'entre eux comporte la simulation d'un cas de violation des droits des personnes : des stagiaires sans armes se retrouvent devant des policiers armés (un sergent et un agent) qui maltraitent verbalement et physiquement deux civils en les faisant creuser ce qui pourrait devenir leurs tombes. Les civils supplient les policiers de leur laisser la vie sauve, affirmant leur innocence et, si les stagiaires les abandonnaient, leur mort imminente. Retenue à environ 20 mètres des deux civils par le sergent, policier principal, une équipe de stagiaires, constituée de deux à quatre personnes avec chef désigné, doit négocier seulement avec le sergent. Les membres de l'équipe observent le dialogue entre leur chef et le sergent et ont peu d'occasions de conseiller leur chef. Les stagiaires sont mis à rude épreuve de façon à utiliser les techniques de négociation apprises pour exécuter le mandat de leur mission et plaider en faveur d'un traitement juste pour les civils et favorable à une solution acceptable à toutes les parties.

La présente étude fait suite à deux précédentes (Thomson et Adams, 2007; Thomson, Adams et Waldherr, 2008) qui ont révélé que les membres des équipes de stagiaires sont considérablement plus enclins que les chefs d'équipes à refaire le scénario. Cette conclusion s'explique peut-être par le fait que les stagiaires n'ont pas eu l'occasion de participer convenablement aux négociations que poursuivaient leur chef et le sergent. Par conséquent, ils n'ont pas été en mesure d'exprimer les idées qui leur venaient pendant les négociations. La présente expérience, conçue pour examiner cette possibilité, visait à favoriser un travail d'équipe de niveaux plus élevés. Les stagiaires ont été soit invités à « travailler en équipe » (condition expérimentale), soit laissés à eux-mêmes (condition de base), immédiatement avant l'occasion de tenir un caucus improvisé.

Bien que la manipulation expérimentale n'ait pas semblé favoriser un travail d'équipe de niveaux plus élevés, le fait de concéder aux stagiaires le temps de se consulter pendant les négociations a eu des effets. Pendant les négociations (en dehors des « caucus »), plusieurs comportements propres au travail d'équipe ont été particulièrement fréquents, y compris la correction des erreurs commises par l'un ou l'autre des stagiaires, la responsabilité partagée et la poursuite des objectifs de mission. En outre, tant en condition expérimentale qu'en condition de base, les stagiaires profitaient des occasions de caucus pour se consulter. Par exemple, tous les membres de toutes les équipes ont spontanément échangé de l'information, géré les rôles et se sont soutenus mutuellement, particulièrement dans les équipes multinationales dont le chef provenait de l'étranger. Fait significatif, la majorité des équipes ont tenu des caucus alors que le processus de négociations était avancé et que la fin du scénario approchait, en vue de prendre collectivement une décision (abandonner, continuer de surveiller la situation ou accompagner les civils).

Pourtant, la perception que les stagiaires se sont fait de leur propre contribution aux discussions de caucus et aux négociations laisse croire que les membres des équipes sont toujours moins satisfaits de leur rôle que les chefs d'équipes le sont du leur. Les membres des équipes déclarent avoir contribué aux discussions considérablement moins que les chefs, et que leurs idées ont été moins valorisées et moins exploitées. Conformément aux conclusions des études précédentes, ils seraient marginalement plus enclins que leur chef à refaire le scénario s'ils en avaient l'occasion. Quelques-uns des motifs (possibles) de cette rupture, ainsi que ce que cela signifie pour l'entraînement et la recherche, font l'objet de discussions.

## Executive Summary

As part of a Canadian Forces pre-deployment training course, military personnel participate in several realistic training exercises. One such exercise simulates a human rights violation. In this scenario, unarmed trainees encounter armed police (a sergeant and constable) verbally and physically abusing two civilians and forcing them to dig what could be their own graves. The civilians plead for their lives, continuously declaring their innocence and imminent death should the trainees leave. The trainees are kept at a distance (approximately 60 feet) from the two civilians by the lead police officer, the sergeant (Sgt). Trainee teams lead by a designated team leader and consisting of 2 to 4 members must negotiate with him only. Team members observe the proceedings between the Sgt and the team leader, providing few opportunities to collaborate with their team. Trainees are challenged to use the negotiation skills they have learned to fulfil their mission mandate, and to advocate for the fair treatment of the civilians to promote a successful resolution for all parties.

This study was initiated in response to the findings of two previous two studies (Thomson & Adams, 2007; Thomson, Adams, & Waldherr, 2008), in which team members have shown significantly more motivation to redo the scenario than team leaders. One possible explanation for this finding was that team members were not able to provide adequate input into the negotiation because the team leaders controlled the negotiation with the Sgt. Consequently, team members may not have been able to share ideas they generated over the course of the negotiation. Perhaps providing an opportunity for team consultation during the scenario would allow team members to have greater input and to be able to offer suggestions to resolve the situation. This in turn may contribute to more effective negotiations.

To explore these issues, this experiment attempted to promote higher levels of teamwork during the negotiation by either prompting the trainee teams to “work as a team” (experimental condition) or not prompting them (baseline condition). More specifically, during the interaction, the Sgt says that he has to leave the trainees to talk to his own men. In the experimental condition he mentions that he has heard that these trainee teams work as a team and they can talk to each other. In the baseline condition no mention is made of teamwork among the trainees. The entire scenario was videotaped and later content analyzed for team-level and individual-level behaviours. Trainees also completed a questionnaire immediately after the scenario conclusion exploring their perceptions of team coordination, team communication, team cooperation, and team decision-making as well as investigating their perceptions of the outcome of the scenario.

Although the experimental manipulation did not seem to promote higher levels of teamwork, allowing teams time to collaborate during the negotiation did have a number of impacts. Within the team huddles, teams in both the experimental and baseline conditions took the opportunity to collaborate when it was provided. For example, all teams readily exchanged information, managed roles, and backed each other up, especially in multinational teams, whose leaders were from a foreign country. Teams also showed strong physical cohesion in that they remained in close proximity to each other, and they seemed to share a common understanding regarding mission goals. Team huddles also seemed to allow more team member involvement, as they accounted for 64% of the behaviours observed in the huddles, whereas team leaders accounted for 36%. Importantly, the majority of teams also used the huddle late in the negotiation to collaborate on the decision that the team needed to make (i.e., to leave, watch or follow the civilians) as the scenario drew to a close.

During the negotiation (but excluding team huddles), several team behaviours were particularly prominent. These included correcting team members' errors and sharing and pursuing mission goals. In some multinational teams, team members provided considerable assistance when the leader was a foreign trainee. Overall, however, interactions between teammates during the negotiation with the Sgt were very infrequent, only amounting to 2% of the overall behaviours exhibited. Reasons for this finding are discussed.

However, trainees' perceptions of their own input during team huddle discussions and contribution to the negotiation suggested that team members were still less satisfied with their role than team leaders. They reported having had significantly less input during these discussions than did team leaders, reported that their ideas were less valued and less used during the negotiation. In accordance with previous studies, they were marginally more motivated than leaders to redo the scenario if provided the opportunity. Some of the possible reasons behind this apparent disconnect are discussed.

This research provides some important information relevant to training and research. Results suggest that providing the opportunity to discuss situations like the human rights violation scenario as a team may foster team collaboration and team member idea generation. However, additional training attention might need to be devoted to articulate the optimal nature of teamwork within this context, and whether a more hierarchical or more lateral team approach is likely to yield the most benefit. From a research perspective, developing and refining an instrument that identifies and measures the key elements of teamwork within this unique military domain and other suggestions for future research are discussed.

## Sommaire

Préalablement à un déploiement, le personnel militaire des FC participe à plusieurs exercices d'entraînement réalistes. L'un d'entre eux comporte la simulation d'un cas de violation des droits des personnes : des stagiaires sans armes se retrouvent devant des policiers armés (un sergent et un agent) qui maltraitent verbalement et physiquement deux civils en les faisant creuser ce qui pourrait devenir leurs tombes. Les civils supplient les policiers de leur laisser la vie sauve, affirmant leur innocence et, si les stagiaires les abandonnaient, leur mort imminente. Retenue à environ 20 mètres des deux civils par le sergent, policier principal, une équipe de stagiaires, constituée de deux à quatre personnes avec chef désigné, doit négocier seulement avec le sergent. Les membres de l'équipe observent le dialogue entre leur chef et le sergent et ont peu d'occasions de conseiller leur chef. Les stagiaires sont mis à rude épreuve de façon à utiliser les techniques de négociation apprises pour exécuter le mandat de leur mission et plaider en faveur d'un traitement juste pour les civils et favorable à une solution acceptable à toutes les parties.

La présente étude fait suite à deux précédentes (Thomson et Adams, 2007; Thomson, Adams et Waldherr, 2008) qui ont révélé que les membres des équipes de stagiaires sont considérablement plus enclins que les chefs d'équipes à refaire le scénario. Cette conclusion s'explique peut-être par le fait que les stagiaires n'ont pas eu l'occasion de participer convenablement aux négociations que poursuivaient leur chef et le sergent. Par conséquent, ils n'ont pas été en mesure d'exprimer les idées qui leur venaient pendant les négociations. Si une occasion de consultation d'équipe était donnée aux stagiaires pendant le scénario, leur contribution serait plus importante et ils pourraient faire des recommandations sur la façon de redresser la situation, ce qui en revanche pourrait mener à des négociations plus effectives.

La présente expérience, conçue pour examiner cette possibilité, visait à favoriser un travail d'équipe de niveaux plus élevés. Les stagiaires ont été soit invités à « travailler en équipe » (condition expérimentale), soit laissés à eux-mêmes (condition de base). Concrètement, le sergent interrompt son entretien avec le chef d'équipe des stagiaires pour motif de devoir parler avec ses hommes. Dans la condition expérimentale, il dit savoir que les membres du groupe de stagiaires travaillent en équipe et son absence leur fournit l'occasion de se consulter. Dans la condition de base, aucune mention du travail d'équipe n'est faite. Tout le scénario est filmé, puis le contenu, analysé par rapport aux comportements individuels et d'équipe. De plus, les stagiaires répondent à un questionnaire immédiatement après le scénario pour élucider leurs perceptions de la coordination, de la communication, de la coopération et de la prise de décision de l'équipe, ainsi que leurs perceptions des résultats du scénario.

Bien que la manipulation expérimentale n'ait pas semblé favoriser un travail d'équipe de niveaux plus élevés, le fait de concéder aux stagiaires le temps de se consulter pendant les négociations a eu des effets. Pendant les caucus, tant en condition expérimentale qu'en condition de base, les stagiaires profitaient des occasions de caucus pour se consulter. Par exemple, tous les membres de toutes les équipes ont spontanément échangé de l'information, géré les rôles et se sont soutenus mutuellement, particulièrement dans les équipes multinationales dont le chef provenait de l'étranger. De plus, les membres des équipes ont fait preuve d'une forte cohésion en restant à proximité les uns des autres, et semblaient partager les mêmes idées sur les objectifs de mission. Il semble également que les caucus aient permis une plus grande participation des stagiaires, par le fait que leurs comportements comptaient pour 64 % des comportements observés dans les caucus

comparativement aux comportements du chef d'équipe qui comptaient pour 36 % des comportements observés. Fait significatif, la majorité des équipes ont tenu des caucus alors que le processus de négociations était avancé et que la fin du scénario approchait, en vue de prendre collectivement une décision (abandonner, continuer de surveiller la situation ou accompagner les civils).

Pendant les négociations (en dehors des « caucus »), plusieurs comportements propres au travail d'équipe ont été particulièrement fréquents, y compris la correction des erreurs commises par l'un ou l'autre des stagiaires, la responsabilité partagée et la poursuite des objectifs de mission. Dans certaines équipes internationales dont le chef était de l'étranger, la contribution des stagiaires a été considérable. En général, pourtant, les interactions entre les membres de l'équipe de stagiaires et le sergent pendant les négociations ont été très peu fréquentes, ne comptant que pour 2 % des comportements observés. Les motifs de cette conclusion font l'objet de discussions.

Pourtant, la perception que les stagiaires se sont fait de leur propre contribution aux discussions de caucus et aux négociations laisse croire que les membres des équipes sont toujours moins satisfaits de leur rôle que les chefs d'équipes le sont du leur. Les membres des équipes déclarent avoir contribué aux discussions considérablement moins que les chefs, et que leurs idées ont été moins valorisées et moins exploitées. Conformément aux conclusions des études précédentes, ils seraient marginalement plus enclins que leur chef à refaire le scénario s'ils en avaient l'occasion. Quelques-uns des motifs (possibles) de cette rupture, ainsi que ce que cela signifie pour l'entraînement et la recherche, font l'objet de discussions.

La présente étude est une source d'information importante sur l'entraînement et la recherche. Les conclusions laissent croire que la collaboration entre les membres d'une équipe et leur participation à la genèse d'idées sont favorisées par des occasions de discussions en équipe sur des situations comme le scénario de la violation des droits de la personne. Plus d'attention sur le plan de l'instruction pourrait être nécessaire, cependant, pour définir la nature optimale du travail d'équipe dans le présent contexte, et pour déterminer quelle approche, plus hiérarchique ou plus horizontale, serait plus productrice d'avantages. L'élaboration et la mise au point d'un instrument pour définir et mesurer les éléments clés du travail d'équipe dans ce domaine militaire unique, et des recommandations relatives à des études futures, font l'objet de discussions.



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# 1 Background

Canadian Forces (CF) pre-deployment training recognizes the multiplicity of situations that military personnel will face in operations (e.g., combat, peacekeeping, humanitarian, etc.). Personnel can expect to work in challenging circumstances and to adjust their conduct in accordance with the particular mission objectives. In peacekeeping, for example, military personnel are likely to face highly emotionally charged situations in which they have to build positive rapport with a number of actors, including military factions, local police, warlords, the local population, non-government organizations (NGOs), and other governmental agencies (such as the Department of Foreign Affairs). In current CF operations, emphasis may reside more on the moral and intellectual plane (*Land Operations 2021: Adaptive Dispersed Operations: The Force Employment Concept for Canada's Army of Tomorrow*, 2007). Thus, training for these missions focuses on developing negotiation skills to help promote dialogue that minimizes differences, enhances common understanding of the situation, and produces solutions that help to maintain a secure and stable environment. Strong negotiation skills also help to build positive relationships with the various actors involved.

The current study was conducted in the context of an intensive CF pre-deployment training course preparing personnel for their upcoming missions. During this course, there are a number of training mechanisms meant to enhance military personnel's negotiation skills. First, military trainees receive a half day lecture that details the most essential aspects of negotiating. These include allowing the negotiation parties to express their positions and opinions; listening and being patient when parties stray from the main issue; bringing the discussion back to the main issue; correcting inaccurate information; summarizing the main issue to avoid focusing on peripheral issues; practicing self-restraint; avoiding lies or unrealistic promises; and adjourning when there is no foreseeable resolution. As CF personnel with considerable operational experience, instructors bring these aspects of negotiation to life through recounting their own vivid, personal examples of negotiation situations. Later, trainees participate in classroom scenarios that simulate actual negotiation in operations. On an all day exercise, trainees participate in a number of highly realistic training simulations in a wooded field setting.

One simulation in particular, a human rights violation scenario, is designed to test trainees' abilities to negotiate without the use of lethal force in an extremely antagonistic situation. The team enters a conflict situation in which they must negotiate with a sergeant (Sgt) for the safety of two civilians being beaten and abused. Teams must subsequently make a decision on how to resolve the situation (i.e., leave the civilians, watch as the civilians leave, or follow the civilians) and save the civilians. This training platform provides an ideal opportunity to explore both negotiation behaviour, and moral and ethical decision-making (MEDM) under stress as trainees work to resolve an intense moral situation.

## 1.1 Previous Research and Emerging Themes

Within the current research platform (i.e., a simulated human rights violation scenario), there are 3 main parties, a police Sgt (who is in control of the victims), the civilian victims (who are being mentally and physically abused), and the trainee teams (who are working to protect the victims). Up to this point in the research program, studies have focused on experimentally manipulating variables related to the first two parties. In the first study, the proximity of the female victim was

varied to investigate the impact of moral intensity (Jones, 1991) on trainees' moral and ethical decision-making. It was shown that moral intensity had an impact on the trainees' negotiation behaviour as well as trainees' decision at the end of the scenario (Thomson & Adams, 2007). Specifically, no trainee teams who came face to face with the female victim subsequently chose to leave the stand as the Sgt had requested. These teams seemed to have made a somewhat riskier decision by choosing not to leave, and were more likely to follow the civilians and their captors into the forest or to watch intently as the civilians were escorted into the forest. This finding suggested that a face to face encounter with a female victim may strengthen trainees' sense of responsibility and commitment to the safety of victims in the human rights violation scenario. In the second study in this series, the emotional intensity of the Sgt was varied to determine whether the anger of the Sgt would "carry over" to trainees and make them respond angrily in return (i.e., social contagion effect), or whether it would motivate them to make more strategic choices (e.g., working to diffuse the Sgt's anger before pushing for concessions) while negotiating with the Sgt (van Kleef, De Dreu, and Manstead, 2004a, 2004b). Results suggested that facing an angry (rather than a more neutral) partner had an impact on negotiation behaviour with both social contagion and strategic choice effects evident. Together, these studies showed that moral and emotional intensity has an impact on negotiation behaviour and moral and ethical decision-making. The first two studies experimentally manipulated the behaviour of the civilians and of the Sgt, so this study shifted the focus to the third party in the negotiation, the trainee teams and attempts to experimentally manipulate their behaviour.

Mission debriefs provided to trainee teams by instructors (Directing Staff) immediately after the human rights violation stand have consistently emphasized the importance of teamwork. Directing staff (DS) often ask trainees to reflect on the activities that they did well as a team. For example, trainees are asked how coordinated they had been on a number of dimensions. Did each member of the team have an assigned role? Did the team develop a back up plan (i.e., BATNA – best alternative to negotiated agreement) together? Did they resolve the scenario as a team? In all of these instances, trainees are meant to reflect on the value of teamwork and the use of team resources when encountering a number of different situations in operations. According to the course instructors, therefore, teamwork plays an important role in the success of a negotiation (Thomson & Adams, 2008). However, the two previous studies have indicated that trainees who are team members (and not the team leader) may have a different experience during the human rights violation scenario. For each study, trainees answered a number of questions immediately after the conclusion of the stand. One of these questions asked participants how much they would change their actions if they were provided an opportunity to redo the scenario. Interestingly, data from the first two studies showed a consistent and significant pattern; namely, team members were significantly more motivated than team leaders to change their actions if given the chance to redo the scenario.

One possible explanation for this consistent finding is it might stem from how teams typically function during the simulated human rights scenario. In the human rights violation training scenario, teams typically function in a relatively hierarchical way. Though the leadership role switches amongst team members over the scenarios contained within the half day exercise, one person is always appointed leader for each scenario. In the human rights violation scenario, the team leader is expected to take the primary role facing the Sgt during negotiations, whereas team members (usually 1 or 2 military personnel) typically observe. Analysis of the video from previous studies showed that the team leader seemed to make the team's ultimate decision (i.e., to leave, watch, or follow the civilians as the stand moved toward its conclusion) with little consultation

with other team members. One potential impact of teams functioning in such a hierarchical way is that team members' input might not be actualized over the course of the human rights violation scenario because team members are, for the most part, restricted to being observers. This might discourage the presentation of the novel ideas that individual team members generate as the scenario unfolds.

For example, consider a team member who sees a creative resolution to the human rights violation scenario but does not have an opportunity to introduce this into the negotiation and decision-making processes because of the hierarchical team structure endemic of the military domain. This inability to contribute may hinder the overall performance of the team if the information that the inactive team member has is better than the information that the team leader has. Indeed, there may be some reason to expect that this could be the case. Team members observing the negotiation may have the luxury of both attending to more information in the environment and time to use this information to generate other alternative courses of action. For the team leader actively immersed in the negotiation, the inability to receive different perspectives may tax both creativity and the ability and motivation to present viable solutions especially when faced with an angry, unyielding negotiation partner. If correct, this analysis suggests that the inability to work as a team may detract from both the ability to share critical information adequately as well as diminish a sense of shared contribution to the mission. To have some team members feeling as if their potential contributions to the negotiation were not valued could lead to frustration and "second guessing" the decisions of their team leader. Beyond this potential impact on team processes, such a structure might also detract from the actual team decision-making process. Teams that have (or take) the opportunity to re-group and "huddle" at a particular point in the negotiation might see an increase in possible solutions to the situation as team members are more able to share their ideas with the team leader. As such, providing the opportunity for team members to present their ideas and to contribute to the negotiation could lessen their inclination to want to redo the mission over, and to heighten their satisfaction with the outcome of a team decision. Several different lines of research are relevant to these issues, as reviewed in the section that follows.

## 1.2 Relevant Research

Decision-making is typically described as identifying and assessing problems, generating and implementing solutions, and evaluating consequences (e.g., Driskell & Salas, 2006). In the current study, decision-making is examined at the team level. One advantage of team decision-making is that individual team members often have unique information about the decision at hand which can be shared in a team setting. Potentially, providing a situation in which each team member could share their unique "part of the puzzle" would allow the team to make a more informed assessment, unavailable in an individualistic setting (Larson, Christensen, Franz & Abbott, 1998).

One critical aspect of team decision-making is generating ideas to resolve problems. To do this, teams often engage in a process known as brainstorming; a technique for generating as many creative ideas as possible in a group or team setting (Paulus, 2000). Successful brainstorming with other people demands avoiding evaluation or criticism while generating ideas. The ideal within a team or a group is to generate as many ideas as possible; express whatever ideas come to mind; and to work as a unit to combine and expand group members' ideas as they emerge (Paulus, 2000). Unfortunately, existing research is often contradictory, providing both evidence that brainstorming in highly interactive groups is both more (e.g., Dugosh & Paulus, 2005) and less efficient (e.g., Nijstad & Stroebe, 2006).

Some proponents of brainstorming argue that exposure to the ideas of others will, in turn, generate more ideas, especially when these ideas flow freely rather than being subject to criticism. This account argues that the act of brainstorming itself can be a cognitive stimulator in which ideas lead to more ideas. Indeed, there is some research to support this. Dugosh, Paulus, Roland, and Yang (2000) conducted a number of experiments designed to understand the extent to which exposure to ideas had an influence on idea generation. In one study, some participants were asked to brainstorm after listening to an audiotape containing a high number of stimulus ideas (60) or a low number of stimulus ideas (30). Other participants simply brainstormed without having listened to a tape at all. The number of ideas generated was assessed at two stages. Dugosh et al. found participants who heard a high number of stimulus ideas initially generated more ideas than participants who did not hear a tape. At a subsequent session, participants who had heard a high or low number of stimulus ideas at the initial session generated more ideas than participants who had not been exposed to ideas. If this result can be generalized to a team context, it suggests that exposure to more ideas is likely to lead to the production of more ideas when teams need to work together to solve problems.

In a follow up study, Dugosh and Paulus (2005) had participants brainstorm independently for 15 minutes in conjunction with a computer task. Either 8 or 40 ideas were presented on their computer screens during this brainstorming session. These ideas were either common (i.e., ideas frequently generated in previous studies) or unique (i.e., ideas not frequently generated in previous studies). Lists containing 8 ideas included 1 idea from each category, while lists with 40 ideas included 5 common and 5 unique ideas. Results suggested that exposure to a greater number of ideas seemed to cognitively stimulate participants to generate more novel ideas. Specifically, participants who saw 40 stimuli ideas generated more unique and more non-redundant ideas than participants who saw only 8 stimuli ideas. In fact, other research shows that quantity and quality are strongly correlated (Adanez, 2005; Diehl & Stroebe, 1987). Research suggests that the more exposure individuals have to ideas, the greater the number of ideas he or she can generate of a unique and non-redundant nature. This again suggests that situations in which team members are able to work as a team to generate their ideas are likely to be more conducive to high quality team decision-making.

There is other evidence suggesting that team brainstorming also fosters greater task persistence than individual brainstorming. Nijstad, van Vianen, Stroebe, & Lodewijkx (2004) conducted a study to understand and explore brainstorming persistence for people working either in teams or independently. Participants were run three at a time with half of the participants being told to work together to brainstorm ideas (interactive groups), and half of the participants being told to work individually to brainstorm ideas and then pool their ideas afterwards (nominal groups). There were no time constraints imposed. An additional factor was that the two groups of participants had different “stop rules”. Half of the participants were instructed to brainstorm until they ran out of ideas (“expectancy stop rule”) and half of the participants were told they could stop once they were satisfied with their performance (“satisfaction stop rule”). Nijstad et al. found that interactive groups were more persistent than nominal groups regardless of the “stop rule” in play. The former spent approximately 31 minutes brainstorming, whereas the latter spent only 14 minutes brainstorming. These findings suggest that brainstorming in face-to-face teams may promote higher levels of persistence than when individuals work alone on a brainstorming task. Group members may encourage one another to persist whereas once individuals deplete their resources, they cease brainstorming. In fact, research investigating group decision-making shows that group members report greater commitment to goals, more positive attitudes toward goal attainment, and greater satisfaction with their overall performance than individuals (Hinsz & Nickell, 2004).



Other research in brainstorming also hints that people in more interactive groups or teams may have higher levels of satisfaction with their brainstorming performance than when individuals work alone. For example, Paulus, Dzindolet, Poletes, and Camacho (1993) asked participants to either brainstorm alone or in groups of four. After completing the brainstorming session, participants were asked to rate the number of ideas they had generated as well as their quality. Participants who had brainstormed in groups rated their performance more favourably than participants who brainstormed alone. The interactive group also reported that the ideas generated by other group members helped their own brainstorming performance. In addition, participants who had brainstormed alone reported that they felt they could have generated better quality ideas if they had brainstormed in a group. Moreover, Nijstad et al. (2004) found that participants in interactive brainstorming groups reported greater satisfaction with their performance and enjoyed themselves more than those in nominal brainstorming groups. Other research by Rietzschel, Nijstad, and Stroebe (2006) found those in interactive brainstorming groups were more satisfied with the quality of ideas they generated, with the group's selection process and with the quality of ideas they chose compared to those in nominal brainstorming groups.

It appears, then, that being a part of a group working together to generate ideas positively influences how one views their brainstorming performance. More importantly, the research reviewed to this point suggests that group brainstorming can be a useful technique for generating a large number of good ideas, for increasing both task persistence and commitment to goals in group members, and for producing greater satisfaction with overall performance. Those who participate in a group brainstorming task also seem to enjoy themselves more than individuals who brainstorm alone. However, despite its continued popularity and positive reports from those who participate in group brainstorming, there is opposing evidence suggesting that group brainstorming can also produce fewer ideas and lower quality ideas than brainstorming alone (Diehl & Stroebe, 2006; Mullen, Johnson, & Salas, 1991). Indeed, there is some evidence in the literature that interactive brainstorming groups can inhibit rather than stimulate idea generation.

For example, Rietzschel et al. (2006) found that team members who developed ideas independently of the group and then pooled them (nominal groups) generated more ideas, and generated more original ideas than team members who brainstormed together (interactive groups). A paper by Nijstad and Stroebe (2006) notes several possible explanations for this apparent loss of productivity when working in group settings. One obvious account is social loafing. Individuals in groups with others may not feel accountable for their performance and, as a result they let others do the work. However, Nijstad and Stroebe (2006) report the evidence for this is weak. Another possible explanation for the apparent loss of productivity in groups is evaluation apprehension caused by social anxiety. This phenomenon emerges from a sense of being evaluated by others in the group. Although recognizing evaluation apprehension as an important influence in some group contexts, Nijstad and Stroebe (2006) argue that the loss of productivity when brainstorming in groups may be the result of 'production blockage', which occurs when discussions in which group members take turns while working to generate ideas can derail a group members' train of thought. This may lower the productivity of the group because individuals may be constantly "thrown off", and the ideas of other group members may inadvertently interfere with their own. If this is the case, then providing a situation in which the ideas of group members do not interfere with those of others may help to lower production blockage. In support of this, some research shows that production blockage can be eliminated when participants brainstorm electronically, and are permitted to generate ideas simultaneously while viewing group members' ideas (Gallupe, Bastianutti, & Cooper, 1991; cited in Nijstad & Stroebe). On the other hand, asking participants in electronic

brainstorming sessions to take turns typing ideas rather than working simultaneously each at their own pace seems to reintroduce production blockage (Paulus, Larey, Putman, Leggett, & Roland, 1996; cited in Nijstad & Stroebe). Nijstad and Stroebe (2006) report production blockage is likely a result of the inability to express ideas when they arise and not the result of simply forgetting those ideas.

Despite the importance of a broad range of alternatives and ideas likely to be generated during brainstorming, however, the key issue within a team context is how these ideas are actually brought to bear on the problem at hand. Having a wide range of ideas, teams should be able to identify all of the options and select those that lead to higher quality decisions. Ironically, existing research seems to suggest groups and teams are not necessarily adept at identifying and using the best ideas. Despite the merits of brainstorming concerning the number and the quality of ideas generated, the literature suggests that, although people view brainstorming positively, it may not necessarily translate into better decision-making, i.e., choosing the best ideas. Both interactive and nominal groups have often been shown to be notoriously bad at actually selecting the best ideas that are generated within groups (Rietzchel, Nijstad and Stroebe, 2006). As such, even idea generation does not necessarily lead to better group or team decision-making.

Cast in the context of the current study, existing research seems to suggest the potential for both positive and negative outcomes as the product of more interactive team problem solving and decision-making. There is evidence that if teams are provided more opportunity to interact, they may generate a richer set of ideas, persist on the task longer, and be more satisfied with the outcome of the negotiation than if they do not have any opportunity to collaborate. On the other hand, existing research also suggests that some teams will face situations in which brainstorming will not necessarily foster optimum idea selection and enhanced decision-making.

The current study attempts to explore these issues by attempting to provide teams with increased opportunities to collaborate as a team without any interference from the Sgt. Of specific interest are the kinds of team behaviours likely to be exhibited in teams with these increased opportunities. The current study focuses on exploring several critical team processes (i.e., team coordination, communication, cooperation, and decision-making). The previous two studies using the current paradigm explored negotiation behaviours at the individual and dyadic level (that is, between the trainees and the Sgt) but did not address team level behaviours. However, given the complexity of the situation, it seems reasonable to expect that interactions amongst team members could have a strong potential influence on the performance of teams.

Research by Wilson, Salas, Priest, and Andrews (2007) suggests that when team members come together and utilize the opportunity for communication, they are able to exchange information, coordinate and manage roles and ideas, and increase cooperation and team cohesion. Successful teams, they argue, share information in order to increase their understanding and awareness of the task, members' roles and responsibilities, possible limitations or foreseeable obstacles, and to generate potential solutions. According to Wilson et al., equipped with vital shared knowledge of the objective, the environment, and of their teammates, team members are able to share expectations that increase a sense of 'teamness', trust among members, and collective efficacy (i.e., the team's belief in its ability to successfully perform tasks). Logically, providing teams with more opportunities to step back and huddle with the team should promote higher levels of teamwork. Part of the aim of this study, therefore, is to begin identifying those team processes that emerge in the context of the human rights violations scenario, so that CF pre-deployment instructors can highlight those which will be critical to the team's operational performance.

And, given previous research, how these opportunities might impact on team members' motivation to redo the scenario was also of interest. If they felt as if they had more input into the negotiation, would they be less motivated to redo it if given the opportunity? And, to what extent would team members view these discussions as a means to greater personal input?

Observations of the human rights violation stand in our previous research suggest that when team leaders become engaged in the negotiation, communication is usually directed to the Sgt, and not toward teammates. The typical negotiation setting on the human rights violation stand, therefore, allows team members to independently generate ideas about the situation. In this particular situation, military teams could be seen as a nominal group in that team members observe the interaction between the Sgt and their team leader and are free to generate ideas (or not), sharing them with the team if they have the inclination and when they have a chance. Because team members typically do not communicate directly with one another during the negotiations, they may benefit from specific opportunities to share ideas and collaborate as a team.

In this experiment, trainee teams will engage in a negotiation scenario and teams will have the opportunity for a short "team huddle" two times during the scenario. Providing these teams with an opportunity to collaborate in the team huddles gives them the chance to pool individual information. These teams will have the opportunity to capitalize on the diversity of ideas from all members, and to increase the quality of negotiation through combining the skills, knowledge, and expertise of all its members. As well, team huddles may provide the opportunity to give and receive input, which may increase collective efficacy of teams. In other words sharing information can, even if it is not used or does not change the outcome of the situation, lead to increased team cohesion that can contribute to a higher level of performance and satisfaction (Wilson et al., 2007).

It is expected that, when given the opportunity to huddle, team members will exchange information through transferring and requesting information, offering suggestions, provide and offer assistance and support to each other, clarify designated roles, and give instruction. These activities may lead to an increased sense of team cohesion and trust among members, resulting in higher adaptability and performance during negotiations. As a result of successful negotiations, team members are expected to have a greater sense of satisfaction.

## 2 Method

### 2.1 Overview of Training

This experiment occurred during an intensive CF training course for personnel who will deploy on overseas operations. Skills emphasized in this course include negotiation and communication, as well as pragmatic skills likely to be important on most operations (e.g., first aid training). As part of this CF pre-deployment training, teams complete several dismounted field exercises where they must apply classroom instruction to realistic simulations. These exercises provide trainees an opportunity to react to live situations characteristic of their upcoming missions. For example, participants must practice the negotiation and communication skills gained during classroom training. It is critical to note that though students know they will face many different challenges during these live simulations, they do not know the exact nature of these challenges. As such, the element of surprise is essential. In order to maintain the integrity of this training course (i.e., the element of surprise), the exact details of the pre-deployment training and location will not be disclosed. However, this study was conducted at one specific part of the field exercise, where a simulated human rights violation occurs. This scenario is described in the next section. The data in the current study were collected across three different course serials.

### 2.2 Human Rights Violation Scenario

In this scenario, trainees encounter two<sup>1</sup> police officers (a sergeant and constable) verbally and physically abusing two civilians, and forcing them to dig what could be their own graves. The civilians plead for their lives, continuously declaring their innocence and imminent death should the trainees leave. Trainees have also received information that there have been reports of potential human rights violations in the area by the local police, including the intimidation and possible killing of non-combatants. The trainees must negotiate with the police sergeant (Sgt) and attempt to build a positive relationship with him in order to ensure the safety of the civilians.

The scenario unfolds in a clearing. Role players play the two civilians and two police officers, one is the Sgt, and one is the constable. The Sgt is designated as the primary contact with the trainees, and his role is to prevent contact between the trainees and the civilians, as well as to frustrate the efforts of the trainees to secure the safe release of the victims. The constable guards the civilians, threatens, and simulates beating them to keep the civilians quiet. The police officers wear uniforms and carry light small arms.

The scenario begins when a female victim runs out in full view of the trainees screaming and being pursued by an armed police constable. This occurs approximately 100m ahead of trainees as they proceed down a road in the training area. The constable grabs the female victim, drags her back to a clearing where she joins a male civilian. They are forced to dig what looks like their own grave (demarcated by a couple of headstones) located at the back of the clearing. Throughout the

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<sup>1</sup> Nine of the 26 groups had three police and three civilians in their scenarios. The third police officer served as another constable who was in the background with the civilians.

scenario, the armed police constable verbally and physically abuses the two civilians. Figure 1 shows the scenario in action.



**Figure 1: Gravesite, civilians, and police constable**

Trainees who attempt to get closer to the civilians are stopped at a predetermined point (approximately 60 feet from the civilians and police constable) by the police Sgt who carries a light small arm (see Figure 2).



**Figure 2: Police Sgt at the predetermined point**

Teams who are hesitant to enter the situation are drawn to the predetermined point by the Sgt. He tells the trainees to approach if they wish to talk to him. This demonstrates his control of the situation. Once teams are in arms length of the Sgt, they begin negotiating. The Sgt tells all teams that the situation is police business, and that the teams should go on their way. He explains that the two civilians are “terrorists” or “prisoners”, and the constable is using intimidation techniques in order to help with the interrogation. When asked, he assures the trainees that he was acting under orders of his commanding officer, and if they have any questions they should go to the police station in the village down the road. Meanwhile, the civilians shout pleas to the teams, insisting they are innocent and the police are going to kill them. The constable continuously abuses them, and forces them to continue digging their graves.

## **2.3 Participants**

Participants in this study included 76 military personnel (72 male and 4 female). Sixty-one were Canadians and 15 were foreign students. Participants ranged in age from 25 to 58 with a mean age of 41.6 (std. dev. = 10.3). Seventy-six percent had a university or college degree, 79% had served 15 or more years in the military, and 72% were either a Captain or Major. The majority of the participants (86%) spoke either English or French as a first language. All elements of the armed forces were represented, but the majority were from the Army (51%), followed by the Air Force (25%), and then the Navy (20%). The remaining 4% did not provide information concerning their elemental command. Many of the participants were infantry and logistics officers. Other trades represented included Air Navigator, Signals Officer, Pilot, and Artillery.



## 2.4 Equipment and Set-up

With the same data being captured simultaneously on two different stands, it was critical to match these stands in every possible way. This was done on pre-experimental recces, which worked to match the two different sites as much as possible, by plotting distances and noting potential differences between the two stands. Diagrams of each stand are shown in Figure 3 and 4.



Figure 3: Stand 1 diagram

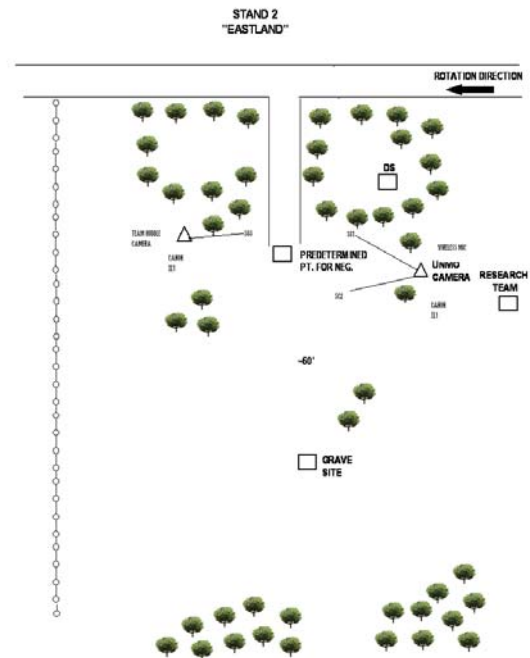


Figure 4: Stand 2 diagram

Figures 3 and 4 show the location of the gravesites as well as the hiding location of the research team and the Directing Staff (DS). To ensure that the negotiation between participants and the Sgt occurred at the same distance from the gravesite for each session on both stands, and to ensure the negotiation occurred in the frame of the hidden cameras, a predetermined point was established by the research team. This point was approximately 60 feet from the gravesite. It was marked by a broken stick, so that it was not detected by trainees but salient for the role player (Sgt). The area where the negotiation occurred on each stand is identified by a box labelled “predetermined pt. for neg”.

In order to have minimal impact on training, it was also critical to capture the performance of teams on the human rights stand while ensuring that the necessary equipment was not detectable. On each stand, Canon XL2 cameras<sup>2</sup> were hidden in the bushes for video data collection.

Though camera positions varied between each stand, they had similar perspectives and depth of field. The cameras were positioned to film the trainees and the Sgt from two separate angles. These were manned in order to ensure that the trainees and the Sgt stayed in the frame throughout the sessions. To pick up the audio, a Wireless LAV Microphone (Sony) was mounted on the Sgt and was used to capture all conversation between the Sgt and the trainee teams. Three Sennheiser shotgun microphones were hidden on the ground in a triangle approximately 10 feet from the team to pick up the team dialogue when the Sgt was not there. A smaller Sony Digital 8 Handycam was used to film the debriefing.

## 2.5 Experimental Procedures

*Pre-experimental activities* Prior to experimentation, at a lecture facility, potential participants were briefed on the study and voluntary consent was elicited (Annex A). Participants were told that this applied field research was designed to learn more about the factors that influence decision-making in an operational context. However, in order to reduce the chance of demand characteristics, social desirability effects, and other potential methodological confounds, participants were not informed of the purpose of the study (i.e., to investigate team decision making and negotiation behaviour). Participants were informed that our research team would be conducting the study during one of the training scenarios. They were not told, however, which stand would be used for the purposes of the study.

It was emphasized to potential participants that the research was designed to impact minimally on their training. They were informed that if they did not choose to participate in the research, this would in no way change the training that they received. Moreover, they were informed that completion of a short post-scenario questionnaire was contingent on time remaining in the rotation to allow time for proper debriefing by the Directing Staff. Participants were also informed that, with their consent, their performance on the target stand would be videotaped in order to identify and code specific negotiation behaviours. It was also explained that this videotape, relevant results from it, and the questionnaire would be provided to the training system in order to improve their high-quality training. The full consent of every team member was required before videotaping would occur. Participants who chose not to be videotaped could still choose to complete the questionnaires. Once participants had given their consent, we administered the Demographic Questionnaire (Annex B) and gave them an information sheet regarding the study (Annex C).<sup>3</sup>

On the morning of the experiment, the role players (i.e., The Sgt, constable(s), and civilians) received a general script and were briefed by DS concerning general scenario requirements. Following this, the research team explained the particular requirements for the study. There were a number of rehearsals at which time the research team made appropriate adjustments to ensure the highest possible

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<sup>2</sup> For the June data collection only, the cameras used were Sony HVR-V1U, Sony HVR-Z1U, and Canon XHA1. A Sony UWP-C166 UHF wireless microphone was mounted on the Sgt and three Azden shotgun microphones were hidden on the ground.

<sup>3</sup> Seventy-six trainees agreed to participate in this study by completing the questionnaire. Twelve teams chose not to be videotaped, but did complete questionnaires.



consistency between stands and across sessions. During the actual scenario, the research team though hidden from the trainees, could interact with the DS if need be.

*Experimental Manipulation* In order to present teams with an opportunity to collaborate and share ideas, all teams were provided two “team huddles” during the scenario. It was a challenge to find a way in which to introduce a team manipulation in the study context, without being too intrusive into the scenario. These statements chosen were designed to be easily incorporated into the training scenario without disruption and were constructed so that they could plausibly be delivered in both experimental and baseline conditions.

To accomplish this naturally throughout the training, approximately 3 minutes into the scenario the lead Sgt stopped the negotiation to confer with his constable guarding the civilians. At this time, he delivered one of two statements before the team huddle began.

**Table 1: Manipulation script by condition**

	Baseline Condition	Experimental Condition
After 3 minutes...	“I gotta go talk to my partner. I don’t care if you talk, but don’t move around.”	“ <u>I thought you UN guys were supposed to work as a team.</u> I gotta go talk to my partner. I don’t care if you talk, but don’t move around.”
After 10 minutes...	“We gotta leave very soon to get these people to the police station. I gotta talk to my constable.”	“We gotta leave very soon to get these people to the police station. I gotta talk to my constable. <u>You talk to your team.</u> ”

As Table 1 illustrates, these statements provided the Sgt with an excuse for briefly leaving the negotiation, and gave teams the opportunity to collaborate as a team. In the experimental condition, the Sgt’s statement was purposefully provocative, designed to prompt team members (who typically adopt an observational role) into taking a more active role with his or her team during the team huddle. Teams in the baseline condition did not receive this segment of the Sgt’s statement.

The first team huddle occurred at approximately the 3 minute mark of the negotiation and lasted up to 1 minute. The second break was signalled by the DS when he believed the scenario was about to draw to an end. This team huddle occurred approximately 10 minutes into the negotiation.

*Post-experimental activities* Once a resolution<sup>4</sup> had been reached within the scenario, the DS called “Endex” and videotaping was stopped. Participants immediately completed the questionnaire (Annex D), which took approximately 5 minutes. While the DS debriefed the trainees, one member of the research team filmed the debriefing and the remainder of the research team prepared for the next rotation.

At the end of the day, trainees and DS reconvened for an after action review. At the end of this review, the research team debriefed the participants regarding the full purpose of the study. At this time, participants were given the opportunity to give feedback and to ask questions about the research.

<sup>4</sup> See measures section for more information about the scenario’s resolution.

## 2.6 Measures

*Team behaviours* The primary objective of the study was to observe behaviours relating to teams during the negotiation and in the team huddles. A new coding scheme was created based on Wilson et al. (2007) taxonomy, who divided team behaviours into three categories: communication, coordination, and cooperation. Discussions with the Scientific Authority and other members of the DRDC research team helped to further tailor the team behaviour coding scheme to more accurately reflect the particular military context. After a rough draft for the coding scheme had been created, it was formalized based on observations of team behaviours seen on the video during the negotiation and the team huddles. The research team together reviewed team behaviours to refine definitions of behaviours.

The coding scheme was divided into 2 dimensions: Coordination and Team Dynamics. In the existing team literature (reviewed by Sartori, Adams & Waldherr, 2006), the terms “coordination” and “communication” are often used interchangeably and/or coordination is defined solely in terms of communication behaviour. In research by MacMillan, Entin, & Serfaty (2004), for example, the coordination within a team is measured by exploring the type and rate of team communications. For the purposes of this study, then, behaviours related to communication and coordination are subsumed under the general heading of Coordination. Under the Coordination dimension, team behaviours observed and coded included information exchange (transferring information, requesting information, giving suggestions, using inputs, disregarding inputs, agreeing with suggestion), adaptability (adjusting strategies), back up (correcting member’s errors, requesting/providing assistance when needed), and roles (assigning roles, confirming roles, issuing commands).

The Team Dynamic category included behaviours defined as trust (defensive monitoring, or redundant checks on teammate performance or redundant requests for information [McAllister, 1995]), cohesion (physical proximity), and shared common understanding (share and pursue mission goals). Physical cohesion can be understood as teams remaining close to one another; for example, walking together or remaining side by side during the negotiation. Although sharing a common understanding is very difficult to classify and observe (Wilson et al. 2007), for the purposes of this research, it was defined as teams showing observable evidence of being “on the same page” particularly when asking the Sgt questions during the negotiation. In other words, if a teammate was seen following up on a point raised by another teammate, then this was coded as sharing a common understanding because it demonstrated that the team was pursuing the same mission goal at the time.

Target dimensions and activities are outlined in Table 2.

**Table 2: Team behaviours: target dimensions and activity**

Target Dimension	General Activity
Coordination	Information Exchange Backup Roles Adaptability
Team Dynamic	Cohesion Shared Common Understanding Trust

The final team coding scheme had 19 behaviours falling under 6 target activities. These team behaviours also had an observable definition as well as further description of features to guide inclusion/exclusion decisions about ambiguous or novel behaviours.

A member of the research team watched the videotapes for each session and coded the occurrence of the team behaviours during the negotiation with the Sgt. The target dimension, general activity, transcription of the team behaviour, and general example were included with each code. There was also an approximate time and duration of each behaviour recorded. Team behaviours were coded throughout the negotiation as well as in the team huddles. For the team huddles, the dialogue between team members was transcribed and further analyzed for coding purposes. Frequencies of team behaviours were counted, and percentages of team behaviours initiated by team leaders and team members were calculated. It should be noted that capturing the audio data during team huddles proved to be almost as challenging as expected. Factors such as external noise (i.e., gunfire from the rifle range, construction), teams positioning themselves slightly out of the optimal range of the shotgun microphones hidden in the bushes, and team members whispering so that the Sgt could not hear their conversation all impacted negatively on the quality of the team huddle audio. The majority of the audio in 25 of the 28 sessions was successfully captured with only a few phrases missing in some sessions. However, 3 of the 28 huddles were completely inaudible, so the team behaviours in these sessions could not be coded.

Negotiation behaviours Another objective of the study was to observe the negotiation behaviours of individual trainees when prompted to “work as a team” or not prompted to work as a team. The existing coding from the second study (Thomson, Adams, & Waldherr, 2008) was used. It consists of 5 stages, including Preliminaries, Assessing the Situation, Relationship Building, Negotiating Skills, and Teamwork. The stages are not strictly hierarchical (i.e., one stage does not need to be completed before another is started), but are fluid and progression through these will naturally vary from team to team. Each stage is linked with general activities that occur within the stage, as shown in Table 3.

**Table 3: Negotiation behaviours: stage and general activity**

Stage	Trainee General Activity
Preliminaries	Engaging and Establishing a Relationship Having Suitable Body Language in Relation to Sgt
Assessing the Situation	Establishing Situational Awareness
Relationship Building	Building a Positive Relationship with Sgt Building a Negative Relationship with Sgt
Negotiating Skills	Diffusing the Situation Searching for Alternatives Initiate Contact with the Civilians
Teamwork	Intervention

All of these activities have a critical role to play in the negotiation process and behaviours associated with the stages can be either optimal or suboptimal. The coding scheme has a total of 56 behaviours falling under the nine general activities described in Table 4. Each behaviour was linked with an observable definition as well as further description of features to help guide coders' inclusion/exclusion decisions about ambiguous or novel behaviours.

A member of the research team then watched the videotape for each of the 14 sessions and coded the occurrence and duration of the negotiation behaviours for the trainees. Despite the fact that the team leader was fully engaged in the negotiation and thus accounted for the majority of observable behaviours, coding was done at the team level. As such, team members' behaviours were also coded if and when they occurred, with the stipulation that only one behaviour could be coded at a given point in time. In rare cases when two team members performed two different behaviours simultaneously, this defaulted to the team leader in charge at the time<sup>5</sup>. Researchers were able to identify the team leader from administrative documents supplied by the CF pre-deployment training staff prior to experimentation. Roles were further confirmed by the video data.

*Resolving the moral dilemma* Military trainees clearly have a difficult moral decision to make as the end of the human rights violation scenario approaches. On one hand, they have been consistently told by the Sgt that their help is neither needed nor wanted, and they are told to return to their own business. The Sgt makes high demands and small concessions. On the other hand, they are witnessing physical and psychological abuse being perpetrated against people claiming to be innocent and pleading for their help. As the Sgt seeks to push for a resolution to the scenario, teams must make a decision about what course of action they will take. At the end of each stand, the resolution of each scenario was recorded by the research team.

According to the established CF pre-deployment training curriculum, there are 3 possible outcomes to the negotiations on the Human Rights Violation Stand. First, teams are willing to disengage from the situation and leave the civilians with the police<sup>6</sup>. At this point, the trainees prepare to leave the

<sup>5</sup>This constraint was imposed in MEFS I and MEFS II, in order to focus on the behaviour of the primary negotiator, as well as to ensure that durations could be meaningfully calculated (as time was more of an issue in this study). The procedure was maintained in this project for consistency.

<sup>6</sup> The Sgt usually promised the trainees he would meet up with them at Headquarters if they followed the road.

situation<sup>7</sup>, the police take the civilians into the forest, and the civilians are shot. In the second outcome, teams stand at the predetermined point, do not attempt to accompany the police and civilians into the forest, but simply watch as the police lead the civilians away. Once out of sight of the trainees, the civilians are shot. The final curriculum-based resolution is that the trainees refuse to leave the civilians, and they accompany the police and civilians through the forest to the police station. In this case, the civilians live.

Although these outcomes are mandated in the training curriculum, however, some variance in this was occurred across the conducting of the three course serials during which data collection for this study occurred, inadvertently hindering data collection efforts. In the first data collection period, one directing staff did not “force” a clear resolution to each scenario, and simply ended the scenario when he believed it had run its course. In addition, for the final data collection period in another DS initiated a fourth possible resolution. Specifically, rather than directing the Sgt to escort the civilian prisoners through the forest (purportedly to the police station), the DS instructed the Sgt to first walk trainees off the stand at gunpoint, leaving trainees with no choice but to leave the stand. DS later explained that he initiated this unique resolution because they believed it provided a better match to what would occur in actual operations. Witnessing violence against civilians by police would likely make perpetrators wary of being identified and accused of human rights violations. In such a situation, then, marching witnesses off the stand would provide trainees with a higher fidelity training experience. In total, 13 teams were forced to leave at gunpoint<sup>8</sup>.

Questionnaire Participants completed a 19 item questionnaire designed to tap a number of constructs related to team processes during a human rights violation scenario. The full set of questions is presented in Annex D.

The first set of questions was meant to investigate self-reports of team coordination. These questions asked about the extent to which team members provided assistance when needed, their common understanding of the situation and the team’s ability to adjust as necessary during the negotiation.

The second set of questions related to communication within the team. These questions asked how much input all team members had during the team huddle discussions, the extent to which their ideas were actually used, about the quality of information sharing within the team, and how many ideas the team had generated to resolve the situation.

The third set of questions related to the quality of cooperation within the team. Trainees were asked how much the negotiation had benefited from team member input and the extent to which participants felt their contributions to the negotiation was valued by their team.

The next set of questions related to the team huddle. As a manipulation check, participants were required to indicate how many times their team had an opportunity to discuss options without the interference of the Sgt. The scale ranged from 0 to >5. In order to explore the perceived impact of providing team huddles as a means of fostering greater collaboration among team members,

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<sup>7</sup>It should be noted the nature of the exercises prevent trainees from wholly leaving the situation because they know they are being observed by the DS and that they will be briefed at the end of the session. However, when teams motioned back toward the road after the Sgt had said good-bye, this was recorded as the team having left the situation.

<sup>8</sup> Twelve teams left at gunpoint and 1 team was allowed to watch at gunpoint.

trainees were asked if these opportunities helped or hindered their team’s performance (where the scale ranged from *hindered* to *no effect* to *helped*).

To tap team decision-making, trainees were asked how their team made the decision during the mission scenario. They could choose from 4 options, which include: (1) leader made decision without consulting team, (2) leader made decision after consulting team, (3) team made decision as a unit, and (4) any other response.

The next set of questions, used in the first two studies, asked trainees to rate the overall quality of the outcome of the scenario and the overall quality of their personal response to the scenario (where a 9 point scale ranged from *worst possible* to *best possible*). Participants were also asked to rate the extent to which they would want to change their own actions if they could redo the scenario (where a 9 point scale ranged from *not at all* to *completely*). As a follow-up question, participants who had indicated they would like to redo the scenario were provided an open-ended section to list what specifically they would have done differently if provided the opportunity.

In the final set of questions, participants were asked to rate both the Sgt’s anger level as well as their own anger toward the Sgt (where a 9 point scale ranged from *not at all* to *extremely*). The Sgt was instructed to be relatively angry throughout the scenario.

Data collection occurred during 3 courses over the summer and fall of 2007. Table 4 shows the number of teams by condition for each data collection period and how many teams voluntarily consented to filming.

**Table 4: Date of data collection**

Date	Baseline Sessions	Baseline Sessions Filmed	Experimental Sessions	Experimental Sessions Filmed
Summer 2007	4	0	3	2
Fall 1 2007	6	3	3	3
Fall 2 2007	3	1	7	5
Total	13	4	13	10

## 3 Results

The following sections report the results from the field study. These results include demographic data, team level behaviours, individual negotiation behaviours, data relevant to the scenario outcome, and the questionnaire data.

### 3.1 Demographic Data

The first analysis compared the demographic characteristics of participants in the experimental and baseline conditions. The only marginal difference between conditions was in education, with participants in the experimental condition having a marginally higher education level than those in the baseline condition. This pattern was due to 7 participants in the baseline condition having no post-secondary education compared to only 1 person in the experimental condition having no post-secondary education. Thus there were no differences between the groups in terms of years of service, number of prior deployments, age, and rank.

### 3.2 Team Level Behaviours

This section examines team behaviours of the trainees, coded both during the team huddles and throughout the negotiation. Team huddles followed the manipulation and provided teams with two opportunities to speak freely as a team while the Sgt went back to the gravesite and spoke with his constable (approximately 60 feet away from the trainees). There is some reason to believe that the team behaviours most evident during the team huddle might differ somewhat from those during the negotiation. For example, team members might provide suggestions to the team leader about how to resolve the current conflict or they may share information together what they would not want to share in front of the Sgt. As such, team behaviours in the team huddles were considered separately from those that occurred during the overall negotiation.

Many team behaviours were observed during the team huddles and throughout the negotiation. Coordination behaviours observed included information exchange (transferring information, requesting information, providing suggestions, agreeing with suggestion, using inputs, and disregarding inputs); adaptive behaviour (adjusting strategies); back up behaviour (correcting member's errors, requesting/providing assistance when needed); and roles (assigning roles, confirming roles, issuing commands, asking about tasks). Team dynamics explored included physical cohesion, shared common understanding, and possible trust-related behaviours (defensive monitoring).

The following sections report team behaviour evidenced during team huddles (Section 3.2.1) and during the actual negotiation (Section 3.2.2). Collaborative decision-making in the second team huddle is also described.

#### 3.2.1 Team Huddles

All teams were provided opportunities to discuss the progress of the negotiation at two pre-defined points during each session. These team huddles were intended to provide teams with the opportunity to converse without interference from the Sgt, to share their ideas with the team, and to allow the team to work as a unit to resolve the situation. In theory, prompting trainees to work as a team might

lead to different team-related behaviours during the team huddle. For example, teams might communicate more equally, exhibit greater coordination, and show more effective team dynamics after having been prompted by the Sgt to work as a team compared to teams who did not receive this prompting. Actual frequency of team behaviours during the huddles are shown in Table 5.

**Table 5: Frequency of team behaviours during huddles**

General Activity	Baseline (N=4)	Experimental (N=10)	Total Frequency <sup>9</sup>	% of Team Huddle Behaviours	% of All Team Behaviours <sup>10</sup>
Information Exchange	44	112	156	72%	50%
Role	8	30	38	17%	12%
Backup	1	6	7	3%	2%
Adaptability	0	4	4	2%	1%
Cohesion <sup>11</sup>	0	1	1	1%	1%
Shared Common Understanding	0	5	5	2%	1%
Trust Behaviours	3	3	6	3%	2%
Total	56	161	217	100%	69%

In the experimental condition, the Sgt was scripted at about the 3 minute mark to prompt the trainees to work as a team before leaving to speak with his constable. He stated, “I thought you UN guys were supposed to work as a team. I gotta go talk to my partner. I don’t care if you talk, but don’t move around.” In the baseline condition, the Sgt was scripted to say only “I gotta go talk to my partner. I don’t care if you talk, but don’t move around”, but omitting the prompt encouraging trainees to work as a team. The second team huddle occurred approximately 10 minutes into the scenario, and it was meant to not only prompt trainees to work as a team but also to prompt them to make a decision before the scenario ended. In the experimental condition, the Sgt said “We gotta leave very soon to get these people to the police station. I gotta talk to my constable. You talk to your team.” Again, he left out “You talk to your team” in the baseline condition.

Issues of team coordination, team dynamics and evidence of collaborative decision-making during the team huddles are explored separately in the sections that follow.

### **Team Coordination**

Results show that the most frequently observed team behaviour associated with team coordination was information exchange, consisting of 72% of the coded team huddle coordination activities. Table 6 shows the frequency of specific team coordination behaviours during team huddles.

<sup>9</sup> Total frequency refers to the number of times an individual behaviour was observed across all of the scenarios for the trainees.

<sup>10</sup> Including behaviours both during the team huddle and the negotiation excluding the team huddle.

<sup>11</sup> Cohesion frequencies for both the team huddles and during the negotiation include all instances where a team physically touched one another and remained united. Note: All teams remained in close physical proximity.



**Table 6: Frequency of coordination behaviours during team huddles**

General Activity	Indicators	Team Member Frequency	Team Leader Frequency	Total Frequency
Information Exchange	Transferring information	41	27	75 <sup>12</sup>
	Giving suggestions	33	8	42
	Requesting information	17	11	28
	Using inputs	0	1	1
	Disregarding inputs	1	1	2
	Agreeing with suggestion	4	4	8
Roles	Assigning roles	3	0	3
	Confirming roles	4	2	11
	Issuing commands	9	15	24
Backup	Request/provide assistance	2	5	7
	Correct errors	0	0	0
Adaptability	Adjusting strategies	2	2	4
	Total	116	76	205

Transferring information may be an especially important role for team members during the team huddle. Team members often provided the leader with information about the situation. For example, team members were able to give the team leader general information about the surrounding area, “There is a truck down the road.” Team members also provided critical information about the situation, “There are two civilians that are digging their graves and both guys have guns, which means they’ll kill them if we leave.” Team members may have been in the best position to do this kind of information exchange, because the team leader was fully engaged with the Sgt until the team huddled. Transferring information was sometimes provided through requests. For example, one team member asked, “They [the civilians] belong to the PLA [terrorist organization]?” The team leader answered, “Yes. They [the police] found badges in their [the civilian’s] house.” Other teams gave their impression of the situation stating, “They’re [the police] just playing mind games.” Or they shared their impressions with one another. Expressing his frustration, one team leader said, “Kind of hard to investigate this.” Team leaders and members also provided current status reports of the situation. For example, one trainee said, “The Sgt is coming back”, and another said, “They’re putting the civilians on their knees.” This is evidence that during these brief breaks in the negotiation, teams were still engaged in the situation. Transferring information between team members also served as a reminder of critical information. As the scenario was ending, when the police began marching the civilians into the woods, one team member told his leader, “The Sgt said we can’t follow them”. This particular example was used as a warning to the team leader who began to follow the civilians after the Sgt had expressly told them

<sup>12</sup> The total frequency is more than the sum of the team member and team leader frequencies because the speaker in some cases (e.g., transferring and requesting information and confirming roles) could not be identified.

not to. In this case, the team member transferred critical information to the team leader, which he may have misplaced or disregarded. Overall, team members transferred more information (n = 41 or 55%) than the team leaders (n = 27 or 36%) during the two huddles. Given its frequency, transferring information appears to be a team activity that was facilitated by the team huddles.

Another important aspect of information exchange relates to requesting information and this was also a prominent team behaviour coded. Data showed that providing team huddles seemed to have given teams a chance to request more information from one another, an activity that may not be feasible during the regular negotiation. Trainees often used these opportunities to request information about the general area and about their specific situation. For example, team leaders asked their team members, "What are our coordinates?" or "What are they digging?" Team members also requested information such as, "What direction are they going?" Teams coordinated their activities and information gathering by way of requesting information. For example, one team member asked the team leader about the negotiation. "Have you asked for his commander's name?"<sup>13</sup> Team huddles, therefore, provided an opportunity for teammates to request information from one another. Again, team members requested more information (n = 17 or 61%) than team leaders (n = 11 or 39%) in the huddles.

Information exchange also included giving suggestions. Team members accounted for the majority of the suggestions offered (n = 33 or 79%, compared to team leaders, n = 8 or 19%). As predicted, having had an opportunity to share their ideas, team members took advantage of this. Some suggestions that team members made related to the negotiation, including "You should check his chain of command" or, "Get the Sgt to speak [in order] to assess the situation". Other times, team members suggested a way to resolve the situation. "I would suggest we stick around with these guys", "Tell them [police] we want them [civilians] to be moved" or, "We'll try and get the hostages right? And tell them [the police] we'll take them and interrogate them at our [UN] HQ." Through their suggestions, team leaders elicited input and confirmation from their teammates. For example, one leader said, "We don't want to go see their Captain." His team member responded, "If we go see their Captain, they are going to kill them." Teammates (i.e., both team leaders and members) showed several possible reactions to the suggestions they were given, by agreeing with them, disregarding them, or using them. Sometimes team members disregarded a suggestion. For example, one team member said, "I suggest we call in and tell them what's going on", which was countered by his teammate, "No we'll tell them at the end... There are three guys and we're three guys, we can talk to them." However, team members seemed to agree with the suggestions of other team members more frequently than they disagreed with them. Acting on a suggestion occurred more frequently in the second team huddle, and, in some cases, teams were unable to act on a suggestion because the Sgt prevented them from doing so. It appears then that team huddles encouraged team members to share their ideas that they may have generated while observing the negotiation between the Sgt and the team leader. Perhaps the team huddle was viewed as a more appropriate context to verbalize these than during the actual negotiation

Teams also coordinated themselves by assigning and confirming roles, though these were relatively infrequent. For example, team members sometimes confirmed their roles by asking their team leader

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<sup>13</sup> This utterance could also be an example of back-up behaviour but was coded as requesting information because a team member asked another team member, "Who's his commander?" The team member responded, "uhh...it's..." then he asked the leader, "have you asked for his commander's name?" Thus, in its full context, it seemed more in line with requesting information than back-up.

about a task, “Should we make a report?”. However, assigning roles and confirming roles were observed only a few times in the sessions. More frequently, the team leader upheld his role and issued commands. Some examples included, “Make a report”, “Call in and tell them where we are”, “Don’t walk off in case we don’t know what’s going on. But just relax in place”, and “...if somebody has to go down to the police station [to Echo Charlie] you’re going to go to the police station, we’re going to stay here”. In some cases, team members issued commands ( $n = 9$  or 38% of all commands) to their teammates (both team leaders and team members). Overall, managing roles consisted of 17% of the team activities during the team huddles (see Table 5).

Another way teammates can exhibit coordination is through back-up behaviour, and this can take the form of requesting assistance or providing assistance. Back-up behaviour accounted for 3% of the teams’ activity in the huddles. In the majority of cases ( $n = 5$  or 71%), the team leader requested assistance from his or her teammates. For example, one team leader asked his team what to do, stating he could not force the Sgt to release them. The team member agreed and suggested that the leader tell the Sgt about the cease fire agreement, the Geneva Convention, and the treatment of prisoners. The leader concurred with this strategy. The team leaders used valuable time during the team huddle to solicit assistance from his or her team members for a possible resolution to the situation. In some cases ( $n = 2$  or 29%), team members provided assistance to their team leader. This often occurred in multinational teams that had a team leader from a foreign country. Within such a negotiation, the ability to communicate seamlessly and confidently may be a challenge for trainees less familiar with the English language. This challenge is exacerbated for trainees assigned to be team leaders during the tough human rights violation stand. Team members used the team huddle to provide assistance to their team leader. For example, one team member said to the team leader, “You’ve got to start asking him [the Sgt] questions about what he’s doing here. Get some information about him. And we have to let him know that we’re with the UN and are unarmed Military Observers.” The other team member also added “...tell him [the Sgt] that we’ve radioed up, we’re in location here, and that we’ve reported this.” In another case, a team member explained to the team leader exactly what was going on, “There’s a grave there, a gravesite.” Once the team member felt the huddle was over, he asked his leader, “Do you want to walk with me?” to the Sgt to begin negotiations again.

Finally, one team showed good adaptive behaviour by adjusting their strategic approach to the situation during the team huddle. Adaptability was coded as occurring when team members suggested an alternative once they acknowledged they could not achieve a particular goal or objective. Of all of the teams’ activities during the huddle, adaptability only accounted for 2% of them. SMEs have argued that adaptability to the situation is a critical indicator of a good negotiation (Thomson & Adams, 2008). As such, this may be an under-represented team behaviour.

In sum, teams showed a high degree of coordination throughout the team huddles, but this occurred equally in the experimental and baseline conditions. Teams readily exchanged information, defined roles, backed-up the team leader, and demonstrated adaptability to the situation. Information exchange appeared to be particularly important in this context because, prior to the huddles, the Sgt and the team leader were usually the only two speaking, while team members took notes, assessed the situation, and provided security. Team huddles then gave team members an opportunity to share information, clarify particular points, and express their thoughts. Information exchange is necessary because a teams’ decision will ultimately be based on a comprehensive understanding of the situation. In this context, then, exchanging information is a vital way to build that understanding.

### Team Dynamics

The dynamics within teams were also examined during the team huddles, and are shown in Table 7.

**Table 7: Frequency of team dynamic behaviours during team huddles**

General Activity	Indicators	Team Member Frequency	Team Leader Frequency	Total Frequency
Cohesion <sup>14</sup>	Physical proximity	1	0	1
Shared Common Understanding <sup>15</sup>	Desire to share and pursue mission goals			5
Trust	Defensive monitoring	3	3	6
Total		9	8	12

In general, teams exhibited strong physical cohesion. All teams maintained close physical proximity to one another throughout the team huddles. When they spoke, they often leaned in toward their teammates and spoke softly so as not to be heard by the Sgt and Constable. In other cases, teammates touched their teammate on the arm or shoulder to get their attention. Teams broke apart when the Sgt returned, but still remained in close physical proximity to one another. In this particular context, it is worth noting that one team stressed the importance of staying together at the end of the second huddle. A team member said to his team leader, “Never go alone” and the latter responded, “Okay, you’re right.” Not only does this example demonstrate a desire to remain as a team, but it also points to the gravity of the situation in which the trainee team find themselves. The human rights violation stand is a conflictual and dangerous situation. Remaining together is a prudent decision when faced with armed and angry police.

Shared common understanding was also observed in the team huddles. Teams demonstrated a common desire to pursue mission goals and seemed to agree that saving the civilians, as well as reporting and documenting what they were witnessing, were the priorities in this situation. As mentioned in the section above, much of the information exchange reflected these mission objectives. However, there were some examples noted in the team huddle of teammates being on a somewhat different track. There were several examples of teammates interrupting each other. This may be expected as team members want to express their thoughts as they come to mind, but are likely to be cognizant of the time constraints. With that said, most teams typically worked toward the same goals by harmonizing their line of thinking in an effort to free the prisoners. Overall, coded demonstrations of physical cohesion and a shared common understanding represented 3% of the teams’ activities during the huddles.

Trust-relevant behaviours may also have reflected dynamics within the teams. The observable trust behaviours demonstrate possible instances of trust or a lack of trust. Because this psychological state is difficult to observe through actions and communication, the coding is speculative and needs further testing to ensure the observations are valid. In general, teams seemed to share information

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<sup>14</sup> The frequencies represented for physical proximity only include when a teammate touched another teammate. All teams remained united throughout the huddle, thus individual instances were not coded.

<sup>15</sup> Because coding is done at the individual level and the desire to share and pursue mission goals (common understanding) requires more than one person, instances were simply tallied as a total frequency.

freely, noted in the existing literature to be indicative of trust (e.g., O'Reilly, 1978). However, there were some examples noted that may have signalled a lack of trust in other teammates. Existing trust literature, for example, argues that defensive monitoring behaviours such as redundant checks on teammate performance or redundant requests for information can signal low levels of trust in other people (e.g., McAllister, 1995; Strickland, 1958). One of the many possible psychological phenomena at play may be defensive monitoring. Specifically, some team members took time to check up on the behaviour of teammates. One team leader asked his team member, "Did you report there was..." But before he could answer, the latter interrupted and said, "I already reported to zero". Following this, another team member began speaking, but was again interrupted by the first team member, "Listen, I've already reported to zero that you were negotiating...3 civilians were forced to dig holes, beaten...they have our grid position." The team member wanted to ensure his team leader that he had completed his task. Another possible example of a lack of trust occurred in a multinational team where the leader was a foreign student. One team member asked, "Did you tell them the General signed it [peace agreement], and you're going to have to report this? And you don't want to see him get into trouble and there are ways to deal with these people that are legal." The team member was uncertain that his team leader had covered off what he (the team member) believed were important points so he took the time to double check. Again however, it is important to reiterate that the coding and inferring of possible trust behaviours would be subject to verification by knowing the actual psychological state of the people emitting these behaviours.

As a whole, however, teams showed strong physical cohesion and a shared common understanding during the team huddles. They remained in close proximity to one another as they discussed their options and exchanged information. Team members also seemed to have the same mission goals, despite making different suggestions and interrupting their teammates. This is not unexpected, given the team huddles were meant to provide teams with an opportunity to generate ideas. The team dynamic might have been a bit hampered by some of the instances of lack of trust. Of course, as noted by Wilson et al. (2007), classifying and observing team dynamics like cohesion and trust is very difficult. Results in this domain would be more valid if self-reports of these dimensions are incorporated into future research.

### **Collaborative Decision-Making**

As mentioned above, the second team huddle was meant to encourage teams to make a decision as the scenario was winding down. Just prior to the start of the second and final team huddle, the Sgt was scripted to indicate that he was growing impatient with the negotiation and that the "prisoners" were about to be escorted to the police station. Before this could happen, he argued, he needed time for a brief discussion with his Constable. After he left the negotiation, teams had another opportunity for short discussion about their options, given the Sgt's indication. If teams were seen developing a plan for the resolution of the scenario, this was coded as evidence of collaborative decision-making. Eight of 14 teams actually used the second team huddle to make a decision. Some teams showed elaborate decision-making in the second team huddle. In one particular example, the team made a number of suggestions. To begin, they considered the possibility of taking the civilians with them. Recognizing the improbability of this option, the team leader suggested something new, saying:

*"Okay, what I'm going to want to do is, if anything, we're going to go with them to the police station. Otherwise, if one of us has to depart, one of us will go to the police station, the other two will stay here and watch this. So if we have to, if somebody has to go down to the police station you're going to go to the police station, we're going to stay here."*

Although this plan involved dividing up the team, he separated the team so that two people would be together with the Sgt and Constable, while the other went for help. The leader gave the command of who would go and the assigned team member acknowledged this plan. While still maintaining command, the team leader made his decision after collaborating with the team.

Other teams recognized the need to remain engaged in the situation to prevent harm to the civilians. The two decisions most often articulated in the team huddles were to stay in the situation and not leave the civilians, or to walk with the Sgt and civilians to HQ (Head Quarters). For example, one team’s decision strategy was to, “...keep this going and calm him down...” because “they can’t kill them while we’re here...” Similarly, another team said, “I would suggest we stick around with these guys”, and then decided to “...walk in a bit more...” to get closer to the civilians. Moving the civilians out of the current situation and away from harm is the most common solution to the human rights violation stand, and it was observed in the huddles as part of the collaborative decision-making process. Two of the 6 other teams did not say anything in their second huddle, while the other 4 teams gave suggestions on the negotiation itself.

### 3.2.2 Negotiation

Team behaviours were also coded throughout the negotiation. As team huddles fostered team activity by their very nature, it was important to also look at team behaviours during the actual negotiation with the Sgt and how team behaviours evidenced during the negotiation would compare with those seen in the huddle. Overall, team behaviours were relatively infrequent during the negotiation, as shown in Table 8.

**Table 8: Frequency of team behaviours during negotiation**

General Activity	Baseline (N=4)	Experimental (N=10)	Total Frequency <sup>16</sup>	% of Negotiation Behaviours	% of Team Behaviour
Information Exchange	29	24	53	55%	17%
Role	3	7	10	10%	3%
Backup	3	11	14	15%	4%
Adaptability	0	0	0	0%	0%
Cohesion	3	2	5	5%	2%
Shared Common Understanding	1	11	12	13%	4%
Trust Behaviours	0	2	2	2%	1%
Total	39	57	96	100%	31%

<sup>16</sup> Total frequency refers to the number of times an individual behaviour was observed across all of the scenarios for the trainees.

Of all of the coded behaviours, team members addressed one another only 2% of the time. Most of the interaction was between the trainees and the Sgt. As a consequence, 98% of the coded trainee behaviours were directed toward the Sgt. More specifically, behaviours that were considered team behaviours during the negotiation were divided roughly equally between referents. For example, teams talking to each other accounted for 44% of the coded team behaviours throughout the negotiation, whereas team behaviours that were directed toward the Sgt, such as correcting member's errors or a desire to share and pursue goals, accounted for 56% of coded team behaviours.

### Team Coordination

As shown in Table 9, the coordination behaviours observed in the team huddles were also observed during the negotiation.

**Table 9: Frequency of coordination behaviours during the negotiation**

General Activity	Indicators	Team Member Frequency	Team Leader Frequency	Total Frequency
Information Exchange	Transferring information	3	14	17
	Giving suggestions	7	2	9
	Requesting information	4	4	8
	Using inputs	2	15	17
	Disregarding inputs	0	0	0
	Agreeing with suggestion	1	1	2
Roles	Assigning roles	0	0	0
	Confirming roles	0	0	0
	Issuing commands	3	7	10
Backup	Request/provide assistance	2	0	2
	Correct errors	0	12	12
Adaptability	Adjusting strategies	0	0	0
	Total	22	55	77

Information exchange also occurred during the negotiation, but with a lower frequency. In this context, information exchange was often in the form of transferring information from the team leader to his or her team member for the purposes of note taking. Many of the team behaviours observed in the team huddles showed a sharp decline during the negotiation. Giving suggestions went from 42 instances in the team huddles to only 9 in the negotiation. On the other hand, there were some team behaviours that occurred more frequently in the general negotiation. For example, using inputs from team members was observed during the negotiation between the team leader and the Sgt. It occurred 17 times. Naturally, correcting member's errors (back-up) occurred during the negotiation but not in the team huddles.

For example, during the negotiation, the Sgt was very reactive to the behaviours of the team. When the team was behaving in a way that the Sgt did not like, he made it known, revealing his anger and

frustration. In one particular case, one team member was wandering around on the site while the Sgt was speaking to the team, and this made him angry. He shouted “Hey! I’m talking to you…” demanding the team leader “...get him over here right now!” The Sgt then explained, “You guys come to our country, you don’t treat us with any respect. I’m talking to you, you’re not looking at me, you’re still looking at them [civilians]”. The Sgt then threatened to shut down the negotiation if they did not all pay attention to him. At this time, the team leader attempted to excuse his team member (i.e., correct his team member’s error) by stating, “He’s getting old, eh. He’s got stiff legs.” The team leader then tried to establish common ground with the Sgt as a way of positively refocusing the negotiation, by asking, “How long have you been in the military?” Back-up behaviour such as this is important because DS have noted that apologizing for a violation of an established rule is viewed as a positive relationship building behaviour in such a situation.



**Team Dynamics**

The specified team dynamics were observed 19 times during the negotiation, as shown in Table 10.

**Table 10: Frequency of team dynamic behaviours during the negotiation**

General Activity	Indicators	Team Member Frequency	Team Leader Frequency	Frequency
Cohesion	Physical proximity <sup>17</sup>	4	1	5
Shared Common Understanding	Desire to share and pursue mission goals <sup>18</sup>			12
Trust	Defensive monitoring	1	1	2
	Total	5	2	19

The coherent approach that most teams showed seemed to suggest that team members had the same goal and approach to the situation, i.e., a shared common understanding. Although there were teams that seemed to pursue somewhat discrepant lines of questioning, teams negotiated in a highly consistent way even while the teammate asking and responding to questions shifted. Teammates often asked questions of the Sgt one after another that demonstrated they were synchronized in their thinking, which seemed to aid the negotiation in a positive way. Maintaining the flow of questioning seemed to demonstrate that team members were “on the same page”, and that the team was working as a collective unit toward a similar goal. This was observed between team leaders and members, but as well as among team members. In one example in which the stance and the behaviour of the Sgt suggested that the team leader was not being effective, team members stepped in and shared the team leader role. One team member said to the Sgt, "I noticed your guy kicked her," and the other team member followed it up with, "What's his name?" In this simple example, the team member used a diversifying question to follow up on the observed kick and asked the name of the constable kicking the civilian. This relatively seamless shift in the person doing the questioning maintained the flow of the conversation and stands in opposition to teams where questioning jumped from one topic to the next without any necessary connection. Sharing and pursuing mission goals and objectives is important because it enables teammates to build collectively on the negotiation with a common purpose regarding what the team is trying to achieve, and illustrates a common understanding of the situation. Moreover, this sort of dynamic is also helpful because it lessens the potential that the negotiation partner will become confused or frustrated by discrepant lines of questioning.

Throughout the negotiation, teams also showed relatively strong physical cohesion. In the majority of cases, teams approached the Sgt together and started negotiating. However, teams were often not together at the beginning of the scenario. In many cases, one team member remained on the road presumably using the radio or doing a general recce of the area, including a security check. It is

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<sup>17</sup> The frequencies represented for physical proximity only include when a teammate touched another teammate. All teams remained united throughout the negotiation.

<sup>18</sup> Because coding is done at the individual level and the desire to share and pursue mission goals (common understanding) requires more than one person, instances were simply tallied as a total frequency only.

difficult to know how this impacted the Sgt. For research purposes (i.e., enabling videotaping of team members), the person role playing the Sgt position had been instructed to attempt to physically draw all of the team members into the situation.

Few examples of potentially trust-relevant behaviours were obvious during the overall negotiation. This low frequency could underestimate more subtle trust issues occurring within teams that could be explored with other methods (e.g., self-report measures).

### **Other Team-related Observations**

To varying degrees, the majority of teams seemed to adopt a relatively hierarchical approach (i.e., the team leader being the primary negotiator) to the negotiation. Analysis was done on the proportion of behaviours emitted by the team leader versus the team members throughout the negotiations<sup>19</sup>. Team leaders accounted for an average of 68% of all negotiating behaviours, while the rest of the team members accounted for 32%. In teams with a more hierarchical approach (i.e., the team leader was the primary negotiator), the input of other team members was more infrequent. These team member initiations sometimes occurred independently of the team leader, and other times at the request of the team leader. In a couple of cases, the team was extremely hierarchical and the team members simply responded to the leader's requests or commands. There were only a few teams who adopted a more lateral structure in which the input of team members throughout the negotiation was relatively equal to that of the team leader. Three teams had all team members talk approximately evenly, and two teams had the team leader and one member talking evenly, while the other team member did not account for much of the talking.

The potential role of diversity within the teams is also important to note. Sixty-four percent of teams (9 of 14)<sup>20</sup> filmed were composed of at least one member from a country other than Canada. Of the teams that were filmed, 29% (4 of 14) had a foreign leader. Qualitative analysis of the video data suggested that cultural diversity did not appear to have an obvious impact on the overall negotiation unless the leader was from a foreign country and had a recognizable language barrier. Further breakdown of the team behaviour data showed that team leaders and team members who spoke English as a second language had considerably less input than those who spoke English as a first language. In one case, for example, a team leader from another country seemed to have trouble communicating what he wanted to say. Other team members from Canada seemed to recognize this, and they began to take a more active role in the negotiation. As military personnel will be travelling to many different countries, recognizing the need to back-up teammates in this capacity will be a necessary skill to develop.

## **3.3 Individual Negotiation Behaviours**

This analysis compares the negotiation behaviours of trainees in the experimental and baseline conditions. As the results show, there are few differences in negotiation behaviour between the two conditions.

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<sup>19</sup> Non-communication behaviours that were typically only by a team member in a specific role were excluded. For example, taking notes and using the radio were typically done by team members, so were excluded.

<sup>20</sup>Including those teams that were not filmed, 58% of teams in the study were multinational.

### 3.3.1 Overview

Table 11 shows negotiation behaviours categorized by stage and general activity across all scenarios for the trainee teams.

**Table 11: Trainees negotiation behaviours by stage and general activity**

Stage	General Activity	Baseline (N=4)	Experimental (N=10)	Total Frequency <sup>21</sup>	% of Frequency
Preliminaries	Engaging and Establishing Relationship with Sgt	60	157	217	14%
	Having Suitable Body Language with Sgt	8	24	32	2%
Assessing the Situation	Establishing Situation Awareness	194	605	799	51%
Relationship Building	Building a Positive Relationship	38	116	154	10%
	Building a Negative Relationship	60	75	135	9%
Negotiation Skills	Diffusing Situation	13	20	33	2%
	Searching for Alternatives	38	59	97	6%
	Initiate Civilian Contact	19	61	80	5%
Teamwork	Team Intervention	1	9	10	1%
Total		431	1126	1557	100%

Overall, the specified behaviours were coded 1557 times for the trainees. The most common general activity was assessing the situation, accounting for 51% of trainees' behaviours. Following this, the next most common activity was engaging and establishing a relationship with the Sgt, representing 14% of the trainees' behaviours.

The average duration of sessions in the baseline and experimental conditions were also compared. Baseline sessions averaged 11.1 minutes and experimental sessions averaged 12.1 minute in duration.

It is important to note that behaviours were also classified as being either likely to promote a good outcome (optimal) or likely to promote a less positive outcome (suboptimal). In general, one would expect that a greater occurrence of optimal behaviours will foster a more positive negotiation and more suboptimal behaviours will foster a less than positive negotiation.

In the following analyses, frequency counts for specific behaviours would be difficult to compare at a glance because of unequal N's in the baseline and experimental conditions. To facilitate this comparison, the normalized percentage of frequency was computed by dividing the number of instances for a specified behaviour by the total number of instances for the general activity by condition. For example, in the baseline condition, team members shook hands with the Sgt 3 times,

<sup>21</sup> Total frequency refers to the number of times an individual behaviour was observed across all of the scenarios for the trainees.

and there were a total of 60 “engaging and establishing relationship with Sgt” behaviours. In this case, the normalized percentage of frequency for the behaviour of shaking hands is 3 divided by 60, or 5% for the baseline condition.

### 3.3.2 Preliminaries

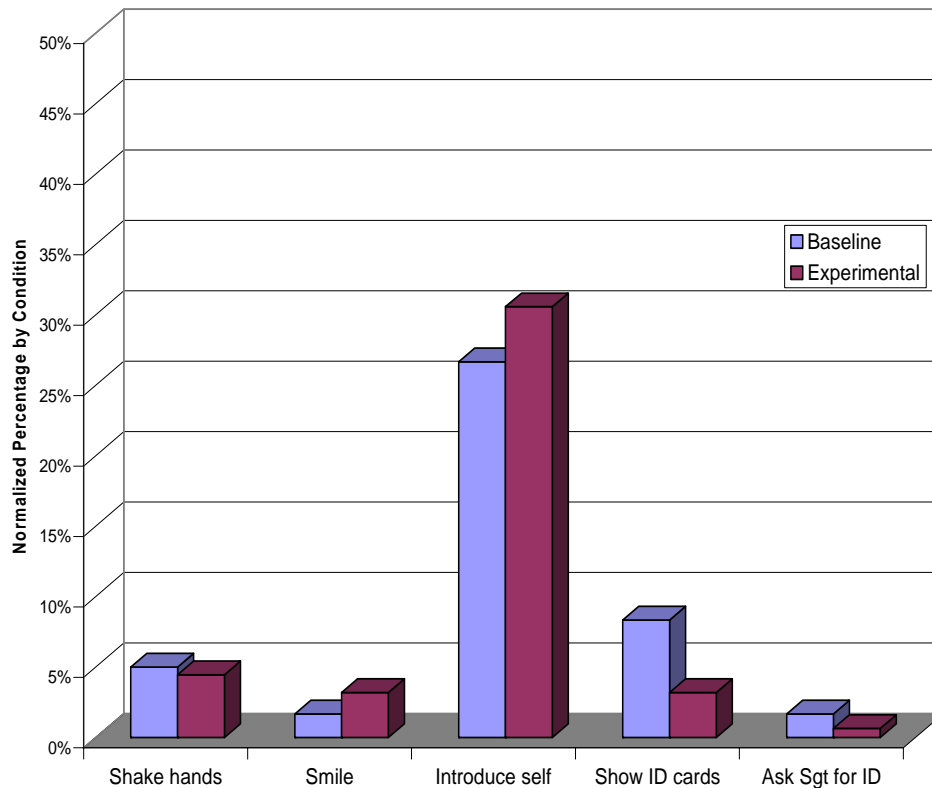
Two general activities associated with Preliminaries were identified. They included engaging and establishing a relationship and having suitable body language. Together, they accounted for 16% of coded negotiation behaviours.

#### 3.3.2.1 Engaging and Establishing Relationship

At the outset of the negotiation, engaging and establishing a relationship can be observed in social behaviours such as shaking hands, smiling, introducing self, showing identification cards, and requesting identification from the Sgt. Table 12 and Figure 5 show the normalized frequency % for each “engaging and establishing” behaviour, as well as the percentage of teams exhibiting each behaviour.

**Table 12: Engaging and establishing relationship with Sgt (A)**

Behaviour	Type	Normalized % of Frequency			% of Teams Exhibiting Behaviour		
		Baseline	Experimental	Total	Baseline	Experimental	Total
Shaking hands	optimal	5%	4%	5%	75%	40%	58%
Smiling	optimal	2%	3%	3%	25%	30%	28%
Introducing self	optimal	27%	31%	29%	100%	100%	100%
Showing organization ID cards	optimal	8%	3%	5%	50%	20%	35%
Asking Sgt for his ID	optimal	2%	1%	1%	25%	10%	18%



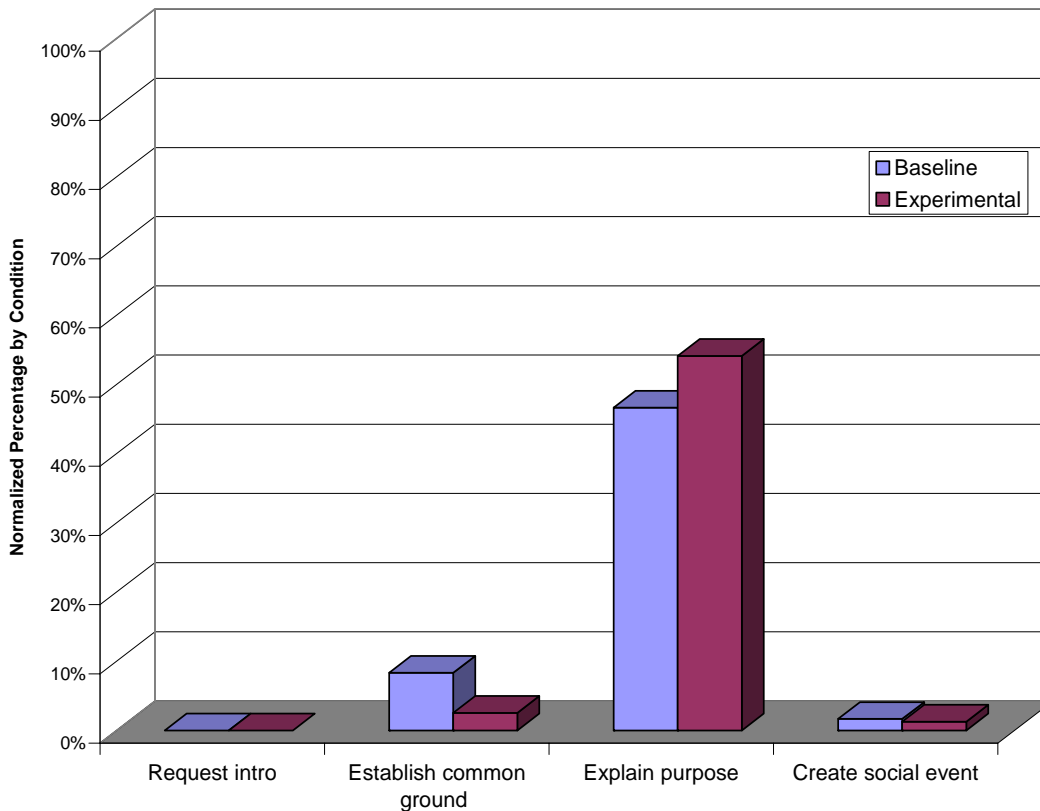
**Figure 5: Engaging and establishing relationship with Sgt (A)**

Behaviours for engaging and establishing a relationship with the Sgt were similar across conditions. The most frequent “engaging and establishing relationship” behaviour was introducing oneself (29%), which was seen in all the teams. Trainees shook hands, smiled, showed ID cards, and requested to see the Sgt’s ID card infrequently across conditions.

Other preliminary behaviours included requesting introductions with the constable, establishing common ground (e.g., “I have a boss too”), explaining general purpose (e.g., “We’ve been tasked to investigate reports about killing civilians”), and creating a social event (e.g., offering water or cigarettes). As shown in Table 13 and Figure 6, explaining general purpose was very frequent in comparison to other preliminary activity, and it included such things as neutral disclosure of information (such as the UN mandate), roles, or mission.

**Table 13: Engaging and establishing relationship with Sgt (B)**

Behaviour	Type	Normalized % of Frequency			% of Teams Exhibiting Behaviour		
		Baseline	Experimental	Total	Baseline	Experimental	Total
Requesting introductions with constable	optimal	0%	0%	0%	0%	0%	0%
Establishing common ground or identity and similarities, sharing point of view	optimal	8%	3%	4%	50%	20%	35%
Explaining general purpose, task, mandate	optimal	47%	54%	52%	100%	100%	100%
Creating a social event	optimal	2%	1%	1%	25%	20%	23%



**Figure 6: Engaging and establishing relationship with Sgt (B)**

On the other hand, establishing common ground was underrepresented. It was seen in only 4 teams (35%), two in each condition. Creating a social event was also very infrequent (1%), and occurred in only 3 teams (23%). A behaviour seen in the first two studies, requesting introductions with the constable was not seen in any team.

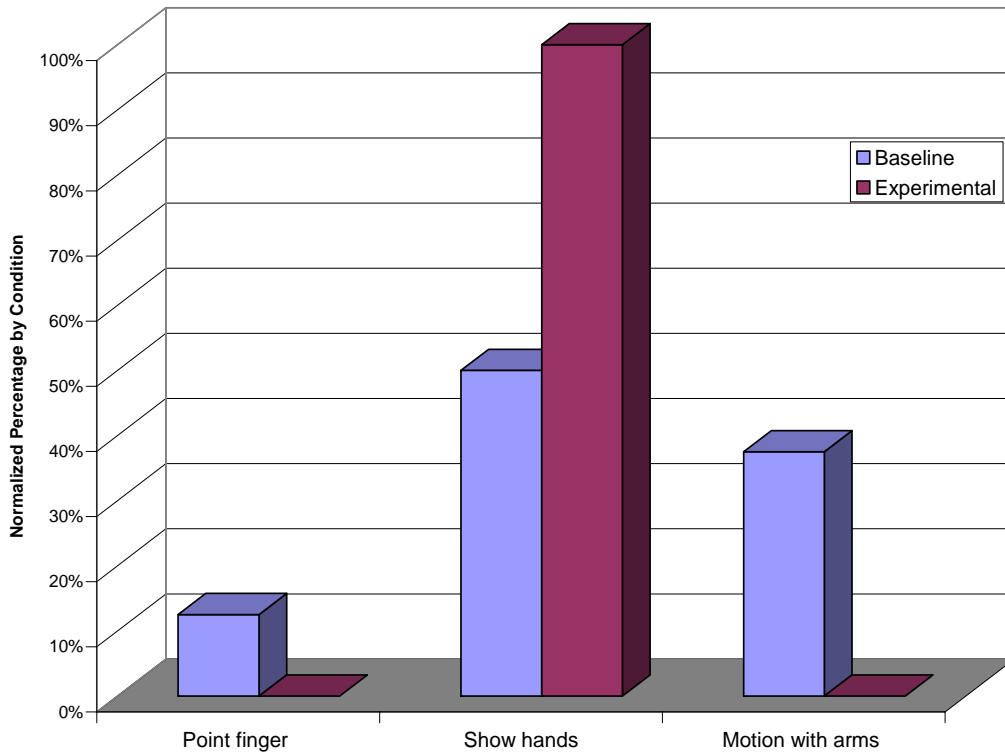
### 3.3.2.2 Having Suitable Body Language

Throughout CF pre-deployment training, appropriate body language is a training point. In this particular scenario, having suitable body language with the Sgt can be observed in behaviours such as pointing finger toward Sgt in a confrontational manner, showing open hands in order to indicate that one is unarmed<sup>22</sup>, and motioning with arms to lower the emotional intensity of the negotiation partner. Body language items and their frequencies are shown in Table 14 and Figure 7.

**Table 14: Having suitable body language with Sgt**

Behaviour	Type	Normalized % of Frequency			% of Teams Exhibiting Behaviour		
		Baseline	Experimental	Total	Baseline	Experimental	Total
Pointing finger toward Sgt in confrontational manner	sub-optimal	13%	0%	3%	25%	0%	13%
Showing open, unarmed hands	optimal	50%	100%	88%	50%	80%	65%
Motioning with arms to lower the emotional intensity of Sgt	optimal	38%	0%	9%	50%	0%	25%

<sup>22</sup> This is a new behaviour added as a result of SME feedback (Thomson & Adams, 2008).



**Figure 7: Having suitable body language with Sgt**

Those trainees in the experimental conditions showed a number of instances of open, unarmed hands. Those in the baseline condition showed open, unarmed hands as well as motioning with their arms to lower the emotional intensity of the Sgt.

### 3.3.3 Assessing the Situation

Properly assessing the situation is a key goal for all military personnel entering into negotiations. Several behaviours are implicated in establishing situational awareness. Key among these are conducting a general recce of the area, taking notes, asking for names of the people involved in the situation (i.e., the police and the civilians), using the radio to communicate with mission headquarters, seeking both general and situation-specific information, and providing relevant information to one’s negotiation partner. Others include inquiring about the nature of the infraction (e.g., “Have the prisoners been to court?”), determining Sgt’s authority structure (e.g., “Who is your boss?”), responding to Sgt’s questions, reiterating Sgt’s statements and announcing intentions to Sgt (e.g., “We’re going to walk along the road”).

#### 3.3.3.1 Establishing Situational Awareness

Behaviours associated with establishing situation awareness accounted for the largest proportion of all observed behaviours (51%; see Table 7). The coding scheme distinguished between information directly relevant to the situation at hand versus information of a more general nature, and whether



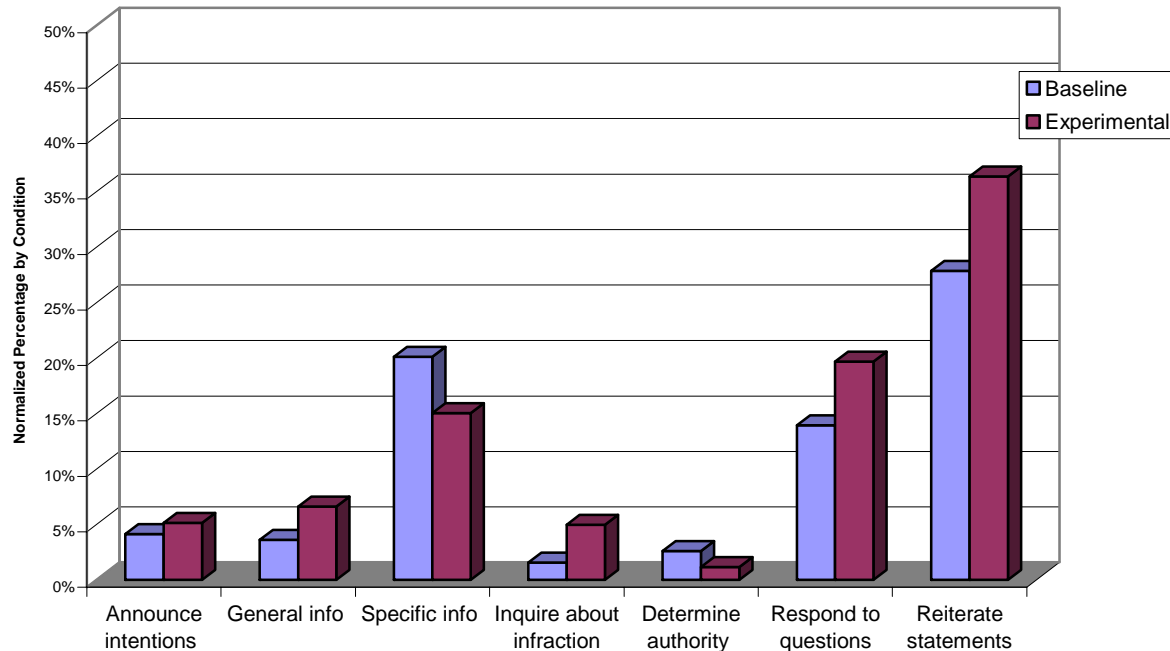
the questions that trainees posed were closed or open ended<sup>23</sup>. Closed ended questions provoke a limited answer (e.g., yes or no) while open ended questions encourage elaboration of an answer. Examples of a situation specific closed ended question would be, “Are you having problems with these people?”; situation specific open ended questions are, “What are those two crosses there?”; general closed ended include, “Do you live in this area?”; and general open ended questions could be, “What have you been told about the UN?” These behaviours are broken down in the following analysis and are accompanied by a number of examples.

As Table 15 and Figure 8 show, the trainees sought situation-specific information more frequently than general information, and this occurred in all the teams.

**Table 15: Trainees’ establishing situational awareness (A)**

Behaviour	Type	Normalized % of Frequency			% of Teams Exhibiting Behaviour		
		Baseline	Experimental	Total	Baseline	Experimental	Total
Announcing intentions to Sgt	optimal	4%	5%	5%	100%	80%	90%
Seeking information not directly relevant to specific situation	optimal	4%	7%	6%	50%	70%	60%
Seeking situation-specific information about what's happening	optimal	20%	15%	16%	100%	100%	100%
Inquiring about nature of infraction	optimal	2%	5%	4%	50%	80%	65%
Determining Sgt's authority structure	optimal	3%	1%	2%	75%	40%	58%
Responding to Sgt's questions/providing information	optimal	14%	20%	18%	75%	100%	88%
Reiterating Sgt's statements	optimal	28%	36%	34%	100%	100%	100%

<sup>23</sup> Codes distinguishing open ended and closed ended questions were added. SMEs showed an interest in knowing the relative frequency of open ended vs. closed ended questions and the content of these questions.



**Figure 8: Trainees’ establishing situational awareness (A)**

Reiterating the Sgt’s statements was the most frequent behaviour in establishing situational awareness (34%), and this was observed in every team. Some teams acknowledged the Sgt’s statements infrequently (6-9 times), while others were quite frequent (31-45 times). These acknowledgments often took the form of “Yup” and “Pardon?” A related behaviour is responding to Sgt’s questions. This behaviour accounted for 18% of the total situational awareness behaviours and occurred in 88% of teams. These two behaviours are important to note because they suggest teams were actively involved in the negotiation, both acknowledging and answering the Sgt.

The less frequent behaviours related to situational awareness included announcing intentions to Sgt (5%). However, this behaviour was observed in almost all of the teams. Inquiring about the infraction committed by the supposed “terrorists” occurred 33 times. To a lesser extent, trainees asked questions to determine the Sgt’s authority structure.

As part of any negotiation, it is important to elicit information in order to understand the situation. Trainees did a very good job asking both general and specific questions (177 times in total). As shown in Table 11, 60% of teams asked general questions and 100% of teams asked situation-specific questions. The relative frequencies in the baseline and experimental conditions were similar. With respect to the number of open ended questions compared to closed ended questions, trainees asked 40% of the former and 60% of the latter. Table 16 shows some examples of open ended and closed ended questions that trainees asked the Sgt during the negotiation.

**Table 16: Examples of trainees' closed and open ended questions**

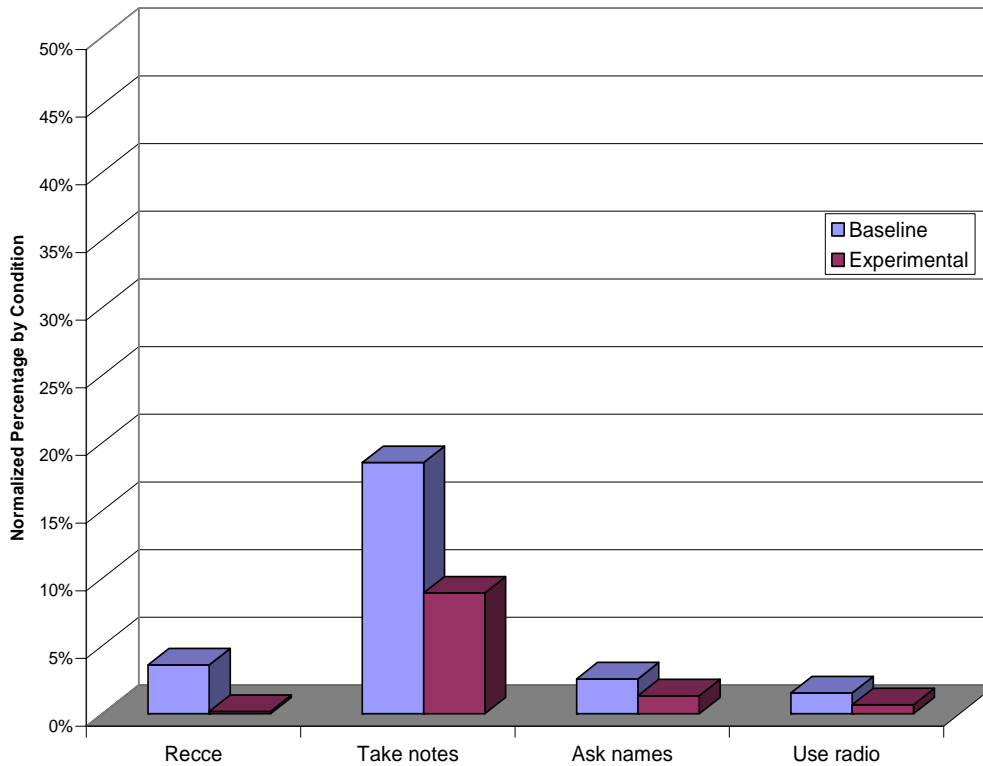
Closed Ended Questions	Open Ended Questions
<ul style="list-style-type: none"> <li>• "How many guys are at the prisoner camp down the road?"</li> <li>• "Do you normally treat civilians this way?"</li> <li>• "Did it happen before that you had to deal with terrorists?"</li> <li>• "Do you have a phone on you?"</li> <li>• "Is it getting any better or worse with the UN around?"</li> <li>• "Do you find that the UN is neutral?"</li> <li>• "Are you familiar with the UN?"</li> <li>• "Do you live in this area?"</li> <li>• "Are you in charge of this area here?"</li> <li>• "Are you having problems with these people?"</li> <li>• "How long are you going to keep them in custody?"</li> <li>• "Is that all you're going to do is make them dig a hole?"</li> <li>• "How long have you guys been doing an interrogation like this?"</li> <li>• "Is everything okay over there?"</li> </ul>	<ul style="list-style-type: none"> <li>• "So in your opinion, how are the prisoners being treated at the camp?"</li> <li>• "Tell me your perspective on the UN helping terrorists."</li> <li>• "What are those two crosses there?"</li> <li>• "How are the civilians getting out of hand?"</li> <li>• "What kind of problems do you think the UN should take care of?"</li> <li>• "How are things in this area?"</li> <li>• "What have you been told about the UN?"</li> <li>• "What exactly are you getting the guys to do then?"</li> <li>• "Who are these civilians?"</li> <li>• "What are the civilians doing?"</li> <li>• "How do you plan on dealing with Friskan terrorists?"</li> <li>• "So what are the intentions with these folks? What are you going to do with them after you're done interrogating them?"</li> </ul>

Overall, trainees asked more closed ended questions than open ended questions, and these were more situation specific questions.

Other trainee behaviours aimed at enhancing their situation awareness are shown in Table 17 and Figure 9.

**Table 17: Trainees' establishing situational awareness (B)**

Behaviour	Type	Normalized % of Frequency			% of Teams Exhibiting Behaviour		
		Baseline	Experimental	Total	Baseline	Experimental	Total
General recce of area	optimal	4%	0%	1%	50%	10%	30%
Taking notes	optimal	19%	9%	11%	75%	30%	53%
Asking for names for notes	optimal	3%	1%	2%	50%	50%	50%
Using radio	optimal	2%	1%	1%	50%	20%	35%



**Figure 9: Trainees' establishing situational awareness (B)**

Conducting a general recce and using the radio<sup>24</sup> occurred very infrequently as did asking for names for notes. In general, these behaviours all had low frequencies. Much of the time, whether teams are permitted to take notes is left at the discretion of the Sgt.

<sup>24</sup> These two behaviours may actually be under-represented because of the limited view provided by the camera. That is, team members not in the camera frame may have conducted general recce activities that went unrecorded. This may have also been the case for radio use.

### 3.3.4 Relationship Building

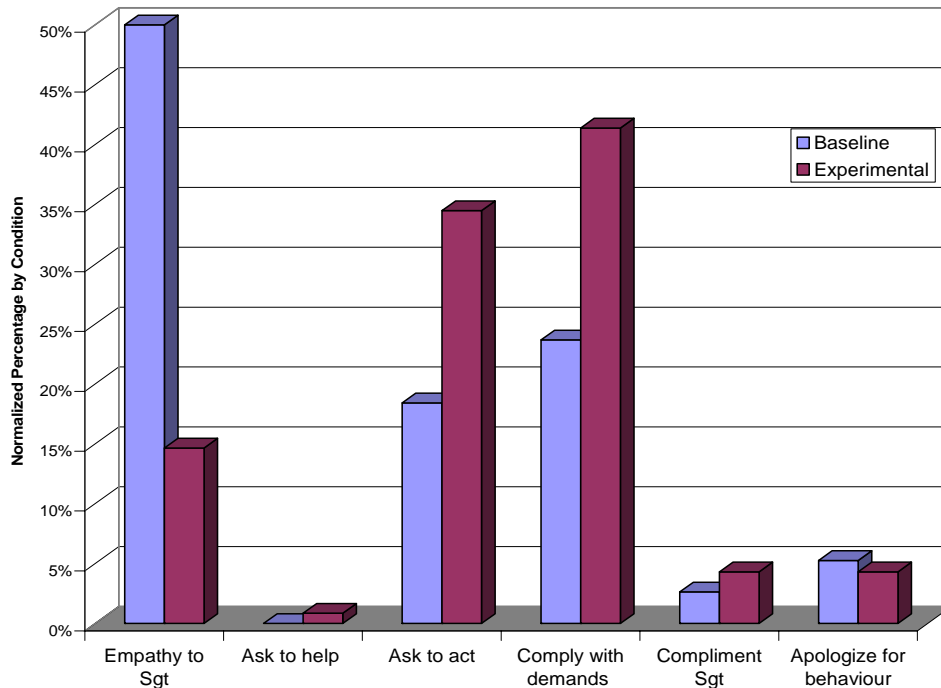
Relationship Building was coded in terms of fostering a positive or negative relationship with the Sgt.

#### 3.3.4.1 Building Positive Relationship

In the negotiation context, we would expect for trainees to be highly motivated to build a positive relationship with the Sgt in order to leverage their negotiation position. Showing empathy and responsiveness (e.g., “We weren’t here when your brother was killed, now we are.”), complying with Sgt’s demands (e.g., moving when told to), and complimenting the Sgt (e.g., “That’s the best kind of punishment” referring to making the prisoners dig holes and fill them back in) could be means by which to build a positive relationship. As well, building a positive relationship with the Sgt could be achieved by asking how they might help resolve the situation, showing respect for the authority of the Sgt by asking permission before acting (e.g., “Can we take notes?”), and apologizing for any negative behaviour trainees themselves may have committed. Frequencies for these behaviours are reflected in Table 18 and Figure 10.

**Table 18: Building positive relationship with Sgt**

Behaviour	Type	Normalized % of Frequency			% of Teams Exhibiting Behaviour		
		Baseline	Experimental	Total	Baseline	Experimental	Total
Empathy and responsiveness to Sgt	optimal	50%	15%	23%	75%	70%	73%
Asking how trainees can help resolve situation	optimal	0%	1%	1%	0%	10%	5%
Asking permission to act	optimal	18%	34%	31%	50%	90%	70%
Complying with Sgt's demands	optimal	24%	41%	37%	100%	100%	100%
Complimenting the Sgt	optimal	3%	4%	4%	25%	50%	38%
Apologizing for own negative behaviour	optimal	5%	4%	5%	50%	40%	45%



**Figure 10: Building positive relationship with Sgt**

At first glance, Figure 10 implies that empathy toward the Sgt was especially frequent in the baseline condition. However, this was because a single team in the baseline condition showed a high level of empathy. In actuality, as the columns in the right half of Table 14 show, the same proportion of teams in the experimental and baseline conditions showed empathy toward the Sgt. Nonetheless, showing empathy for the Sgt was a relatively common way to build a positive relationship with him. Two other positive relationship building behaviours that occurred frequently throughout the negotiation were asking permission before acting and complying with Sgt’s demands. This was more frequent in teams prompted to “work as a team” than teams who were not prompted. Asking permission before acting was only seen in 2 teams who were not prompted compared to 9 teams who were. Complying with Sgt’s demands was well distributed within conditions, and all teams exhibited this action at least once. Both complimenting the Sgt and apologizing for negative behaviour was seen infrequently by all teams. Only one team asked how they could help resolve the situation. The low occurrence of this behaviour may be because teams were more apt to suggest specific ways in which they might help rather than asking more broadly how they might help in the situation (see Section 3.5.5.2: Searching for Alternatives).

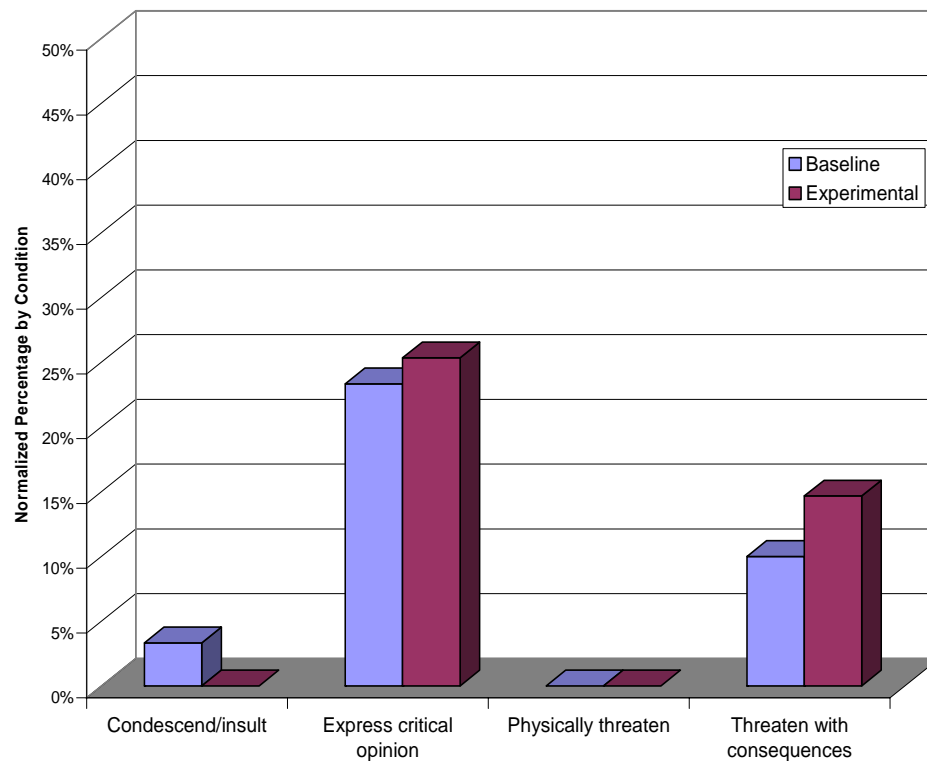
### 3.3.4.2 Building Negative Relationship

On the other hand, trainees showed similar, but lower frequencies of behaviours likely to promote a negative relationship rather than a positive one (135 versus 154, respectively). These behaviours included being condescending or insulting (e.g., “So you have no control?”), expressing opinions critical of the Sgt (e.g., “There’s a proper way to stop terrorists without making you a terrorist.”), physically threatening the Sgt, threatening the Sgt with future consequences (e.g., “We got your names and will report you to higher authorities.”), circumventing the authority of the Sgt (e.g.,

trying to speak over the Sgt to the constable), making demands (e.g., “You bring us to your Captain right now”), boasting, actively opposing Sgt’s demands (e.g., not moving when told to move), acting without asking permission, failing to comply with Sgt demand, and stating relevant regulations (e.g., citing the Geneva Convention). Frequencies are shown in Tables 19 and 16, and Figures 11 and 12.

**Table 19: Building negative relationship with Sgt (A)**

Behaviour	Type	Normalized % of Frequency			% of Teams Exhibiting Behaviour		
		Baseline	Experimental	Total	Baseline	Experimental	Total
Condescending, insulting, sarcastic toward Sgt	sub-optimal	3%	0%	1%	25%	0%	13%
Expressing opinion that's critical of Sgt's' behaviour	sub-optimal	23%	25%	24%	75%	30%	53%
Physically threatening the Sgt	sub-optimal	0%	0%	0%	0%	0%	0%
Threatening Sgt with future consequence	sub-optimal	10%	15%	13%	50%	40%	45%



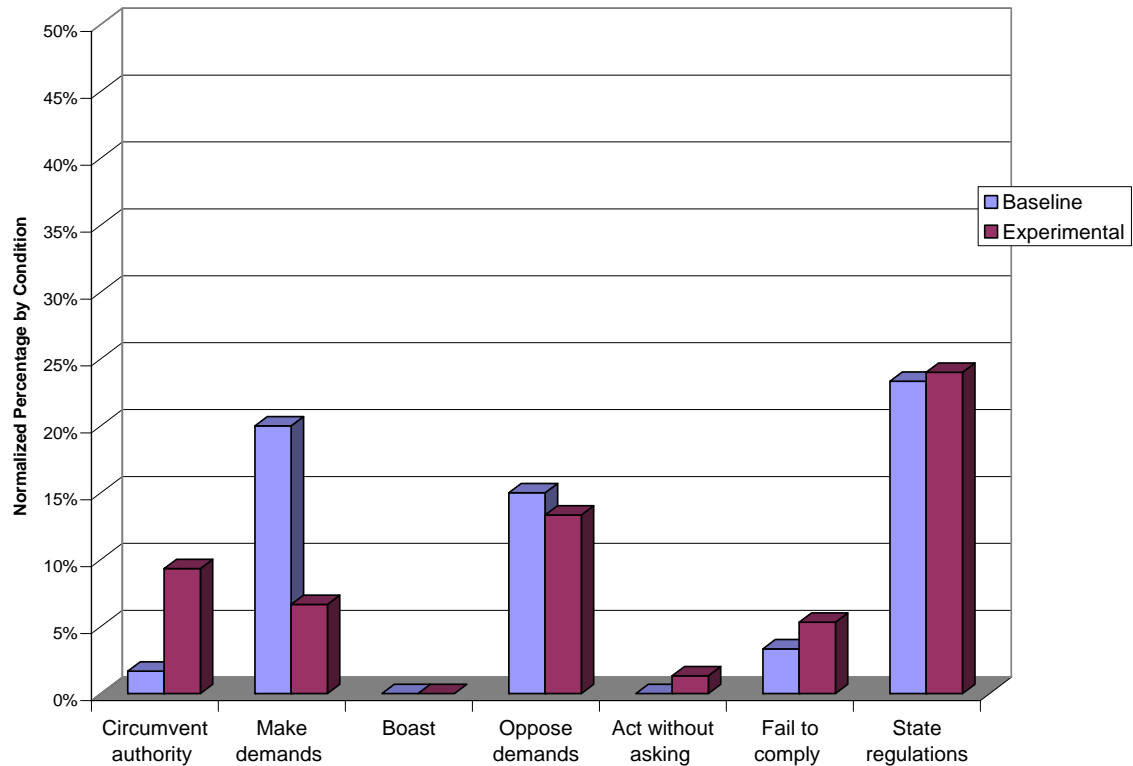
**Figure 11: Building negative relationship with Sgt (A)**

As Figure 11 illustrates, trainees frequently expressed an opinion that was critical of the Sgt's behaviour. Trainees also threatened the Sgt with future consequences, but this behaviour was exhibited by less than half of teams. Only one team acted condescendingly toward the Sgt. None of the teams physically threatened the Sgt, which may suggest that teams were able to lower their personal emotional intensity during the negotiation. Other negative relationship behaviours are shown in Table 20.

**Table 20: Building negative relationship with Sgt (B)**

Behaviour	Type	Normalized % of Frequency			% of Teams Exhibiting Behaviour		
		Baseline	Experimental	Total	Baseline	Experimental	Total
Circumventing authority of Sgt	sub-optimal	2%	9%	6%	25%	30%	28%
Making demands of Sgt	sub-optimal	20%	7%	13%	50%	40%	45%
Boasting about self	sub-optimal	0%	0%	0%	0%	0%	0%
Actively opposing Sgt's demands	sub-optimal	15%	13%	14%	50%	30%	40%
Acting without asking permission	sub-optimal	0%	1%	1%	0%	10%	5%
Failing to comply with Sgt demand	sub-optimal	3%	5%	4%	50%	40%	45%
Stating relevant regulations	sub-optimal	23%	24%	24%	75%	60%	68%





**Figure 12: Building negative relationship with Sgt (B)**

As Figure 12 illustrates, it was very common to observe teams citing relevant regulations<sup>25</sup>. This accounted for 24% of the negative behaviours and occurred in over half of the teams. About half of the teams made demands of the Sgt and actively opposed his demands. To a lesser extent, teams failed to comply with the Sgt’s demands. Teams prompted to “work as a team” attempted to circumvent the authority of the Sgt more often than those not prompted, likely because one team accounted for over half of the frequencies.

### 3.3.5 Negotiating Skills

Each person engaged in a negotiation must make choices about the strategies she or he believes are most likely to be effective. Negotiation skills in this particular context include diffusing the situation, searching for alternatives, and making contact with the victims.

#### 3.3.5.1 Diffusing the Situation

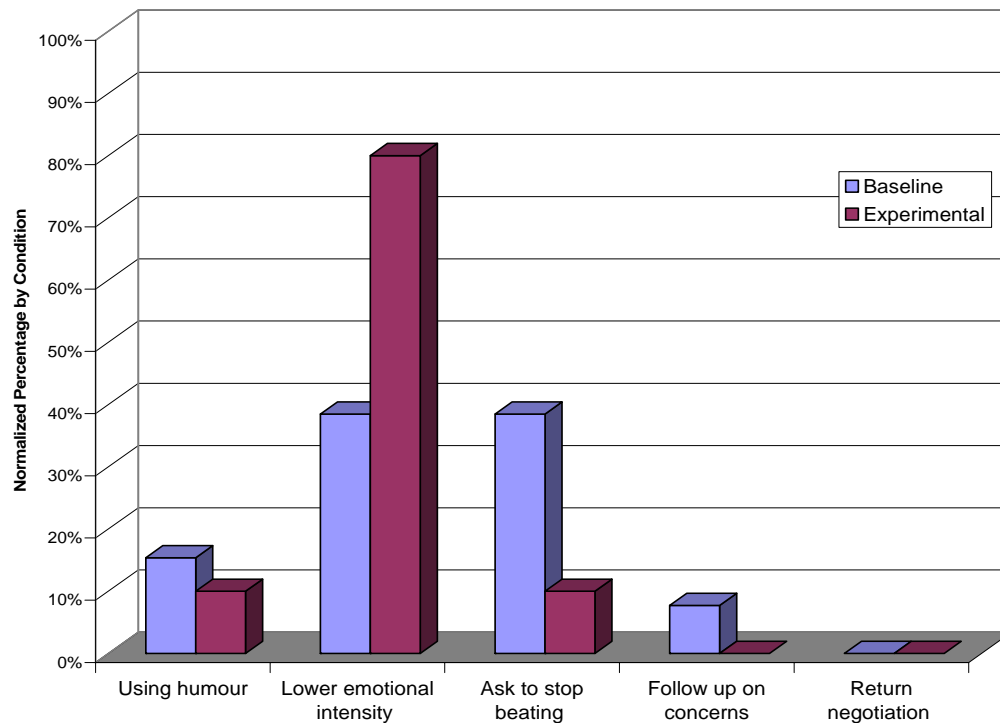
When confronted with the situation, trainees could use several different strategies to diffuse the situation. For example, the use of humour could lighten the situation (e.g., “He’s old, his legs are

<sup>25</sup> Although it is clear that stating regulations can be helpful in some situations, invoking reminders of formal regulations may drive a wedge into potential efforts to develop rapport with the police and as such may not be effective. SME validation efforts also suggest this is not an optimal behaviour in a negotiation context like the human rights violation stand (Thomson & Adams, 2008).

restless.”). Trainees could also attempt to lower the emotional intensity of their negotiation partner (i.e., “Calm down.”). Asking the Sgt to get the constable to stop beating the civilians as well as following up on the Sgt’s concerns (e.g., “Can we talk with the constable?”, and “So why was your brother killed?”) are further strategies that could be used to diffuse the situation. Frequencies for these negotiation behaviours are shown in Table 21 and Figure 13.

**Table 21: Trainees diffusing the situation**

Behaviour	Type	Normalized % of Frequency			% of Teams Exhibiting Behaviour		
		Baseline	Experimental	Total	Baseline	Experimental	Total
Using humour	optimal	15%	10%	12%	25%	20%	23%
Attempting to lower emotional intensity of Sgt	optimal	38%	80%	64%	75%	50%	63%
Asking Sgt to get constable to stop beating civilians	optimal	38%	10%	21%	50%	10%	30%
Following up on Sgt's concerns	optimal	8%	0%	3%	25%	0%	13%
Returning the negotiation to the situation at hand	optimal	0%	0%	0%	0%	0%	0%



**Figure 13: Trainees diffusing the situation**

Those teams who were prompted to “work as a team” more frequently attempted to lower the emotional intensity than those teams who were not prompted, yet it was observed in over half of all teams. Asking the Sgt to get the constable to stop beating the prisoners occurred more frequently in teams who were not prompted (38%) than those who were and occurred only in 30% of all teams. In general, using humour was very infrequent across conditions with only 12% of teams engaging in this behaviour as was following up on Sgt’s concerns

A new behaviour coded in this field study was returning the negotiation to the situation at hand. Tactics such as shifting or derailing the discussion were often used by the Sgt to encourage trainees to talk more about themselves. This tactic prevents teams from gaining information from the Sgt because they are talking and not listening. It was up to the trainees’ to ensure the Sgt shared his interests. However, this behaviour was not observed in any teams. Rather, teams typically reiterated what the Sgt had said and responded to his questions when the Sgt attempted to derail the negotiation (see Section 3.3.3.1: Establishing Situation Awareness).

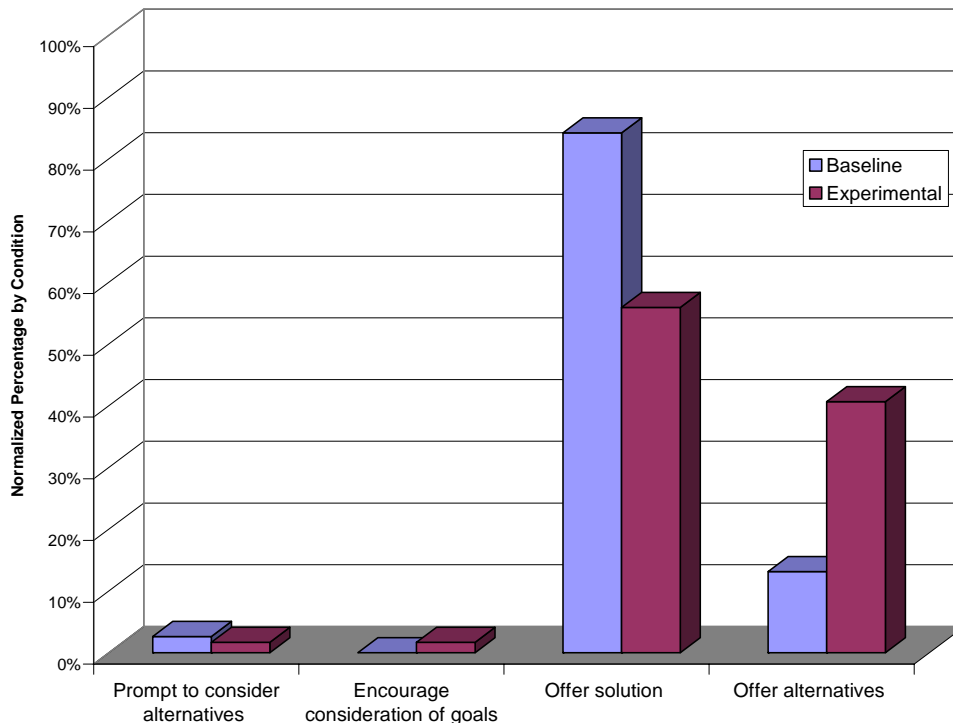
### 3.5.5.2 Searching for Alternatives

Four behaviours that involved searching for alternatives to the situation that teams encountered were also coded. These included prompting or encouraging the Sgt to consider alternatives to his current behaviour (e.g., Trainees trying to address the Sgt’s frustration. “You wouldn’t want to turn that over for someone else to deal with....?”), encouraging the Sgt to consider if beating civilians is the best way to realize his own goals (e.g., “Will this help your organization?”), offering solutions to the current situation (e.g., “Would you like us to come with you?”), and offering alternatives to

the situation (e.g., “Do you want to talk to us over there, out of sight of the prisoners?”). Frequencies for these behaviours are shown in Table 22 and Figure 14.

**Table 22: Trainees searching for alternatives**

Behaviour	Type	Normalized % of Frequency			% of Teams Exhibiting Behaviour		
		Baseline	Experimental	Total	Baseline	Experimental	Total
Prompting/encouraging Sgt to consider alternatives	optimal	3%	2%	2%	25%	10%	18%
Encouraging Sgt to consider if beating is best way to reach OWN goals	optimal	0%	2%	1%	0%	10%	5%
Offering solution to situation or concerns	optimal	84%	56%	67%	75%	50%	63%
Offering alternatives to the situation or concerns	optimal	13%	41%	30%	50%	70%	60%



**Figure 14: Trainees searching for alternatives**

As results show, teams suggested both solutions to the situation at hand and alternatives to what was happening at a particular moment. Though these two may be construed similarly, solutions and alternatives differ in important respects. For example, solutions are ideas that the teams present to the Sgt as a means to resolve the problem at hand (“Why don’t we all go together down to the police station, so that we can talk to your boss and discuss the acts of terrorism that you’re

experiencing in these parts of the country?”). They typically take into account all interested parties (i.e., a compromise). Alternatives, on the other hand, are possibilities presented during the course of a negotiation that might assist the negotiation but are not necessarily aimed at resolving the situation (“If maybe you could get your Constable to come here, then we could talk as a group.”) While observing the negotiation, considering the intent of the team helps signal which category the behaviour falls under. Table 23 lists a number of examples from the videotaped sessions, and demonstrates the subtle difference between the two.<sup>26</sup>

**Table 23: Examples of trainees’ solutions and alternatives to the situation**

Solutions	Alternatives
<ul style="list-style-type: none"> <li>• “We can take the civilians.”</li> <li>• “We can all go to the police station.”</li> <li>• “Can we have a meeting with your Capt?”</li> <li>• “Why don’t you call the local police so they can take care of them?”</li> <li>• “Is it possible that you and your men come with us and we can all go talk to your Captain?”</li> <li>• “Would you like us to come with you?”</li> <li>• “We can stop this and meet and chat together.”</li> <li>• “We’ll call the police to verify they are terrorists.”</li> <li>• “Can we phone the Red Cross?”</li> <li>• “If they are PLA, we can take them into custody and find out.”</li> <li>• “Would you be okay with us coming with you and my team member going to talk to your boss?”</li> </ul>	<ul style="list-style-type: none"> <li>• “Would your guys be interested in talking to my colleagues?”</li> <li>• “Why don’t you put them in jail?”</li> <li>• “Can you take us to your commander?”</li> <li>• “Do you want to talk to us over there, out of sight of the prisoners?”</li> <li>• “Is it possible for your boss to come down? Do you have communication with him?”</li> <li>• “Can you ask your Constable to uncock his gun please, they are unarmed.”</li> <li>• “Can you set down your weapon?”</li> <li>• “Can you get them to stop doing the work their doing?”</li> <li>• “Can we relay through the UNHQ to your boss?”</li> </ul>

### **3.5.5.3 Making Contact with the Civilians**

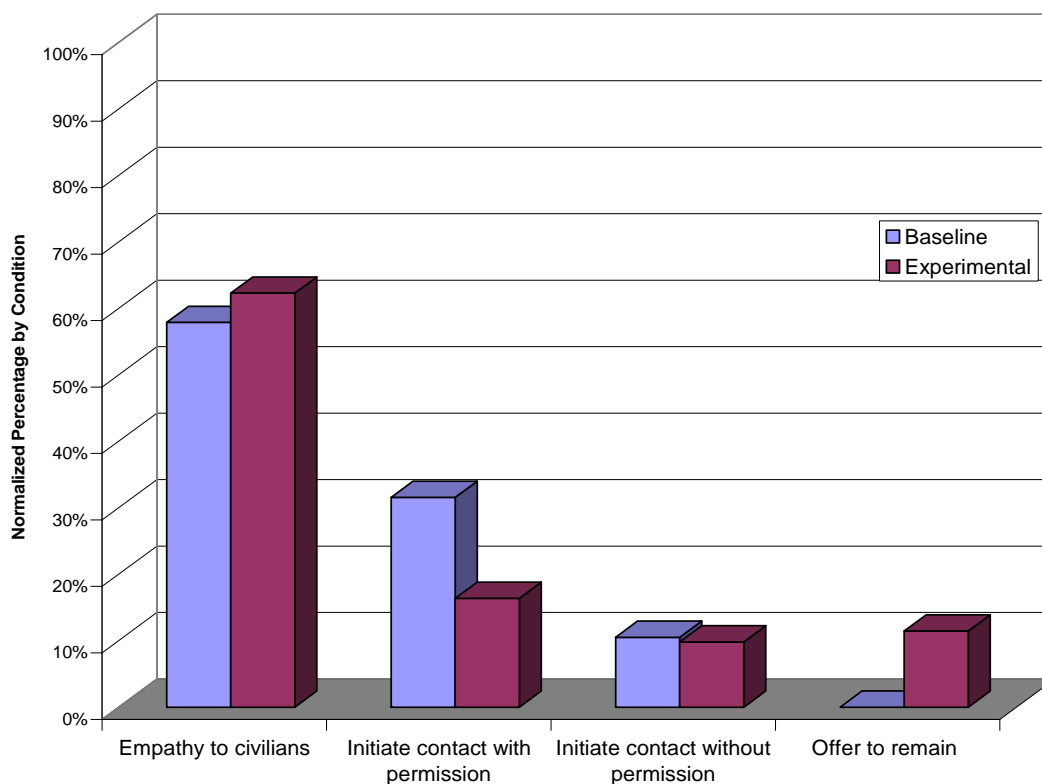
Finally, there were a few different ways in which teams could attempt to make contact with the civilians. For example, they could show empathy and responsiveness to the plight of the civilians (e.g., “Your Constable kicked her.”), or initiate either verbal or physical contact with or without permission. As well, remaining with the civilians was categorized as another form of making contact with them. As seen in Table 24 and Figure 15, 3 teams in the experimental condition offered to remain with the civilians, while none of the baseline teams did (see Section 3.5: Outcome).

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<sup>26</sup> During SME coding validation, instructors explained that they would like to see some examples of solutions and alternatives (Thomson & Adams, 2008).

**Table 24: Trainees making contact with civilians**

Behaviour	Type	Normalized % of Frequency			% of Teams Exhibiting Behaviour		
		Baseline	Experimental	Total	Baseline	Experimental	Total
Empathy/responsiveness to civilians	optimal	58%	62%	61%	50%	70%	60%
Initiating verbal or physical contact with civilians with permission	optimal	32%	16%	20%	50%	60%	55%
Initiating verbal or physical contact with civilians without permission	optimal	11%	10%	10%	25%	20%	23%
Offering to remain with civilians	optimal	0%	11%	9%	0%	30%	15%



**Figure 15: Trainees making contact with civilians**

Teams were empathetic toward the civilians, accounting for much of the behaviour making contact with the civilians. Teams were more likely to ask for civilian contact (20%) rather than attempting it without permission (10%). These results are consistent with the trainees having more positive relationship building behaviours with the Sgt rather than negative ones (see Section 3.4.3: Relationship Building).

### 3.4 Outcome: Resolving the Moral Dilemma

The next set of analyses explored what happened at the end of each scenario, both in terms of the decisions that teams made (resolution) as well as the actual impact of this decision on civilians (outcome). After an extended negotiation, the Sgt is usually signalled by the DS to bring the negotiation to a close, and to indicate to trainees that he and the other policeman intend to take the civilians into the dense forest, purportedly toward the police station. Whether the police actually intend to lead the civilians to the “protection” of the police station or to kill them once out of sight of the trainees is ambiguous. However, given the violence directed toward the civilians throughout the scenario, there is good reason to believe that the civilians might be killed. Teams have a very difficult moral decision to make at this point and they have limited time to decide how their team will respond to the Sgt’s unexpected move to bring the civilians to the police station.

At this point, teams must choose between 3 possible resolutions.<sup>27</sup> First, teams could disengage from the situation and leave the civilians with the police, thereby complying with the Sgt’s demands.<sup>28</sup> If teams make this choice, the scenario is scripted to have the police take the civilians into the forest, and the civilians are shot once out of sight of trainees. In the second possible resolution, teams do not leave the negotiation area, but watch as the police lead the civilians into the forest. Once out of sight of the trainees, the civilians are shot. The final possible resolution is that the trainees refuse to leave the civilians alone with the police, and they accept the risk of accompanying the police and civilians through the forest to the police station. In this case, the civilians live. At the end of each session, the choices that teams made (and the resulting impact on civilians) were recorded.

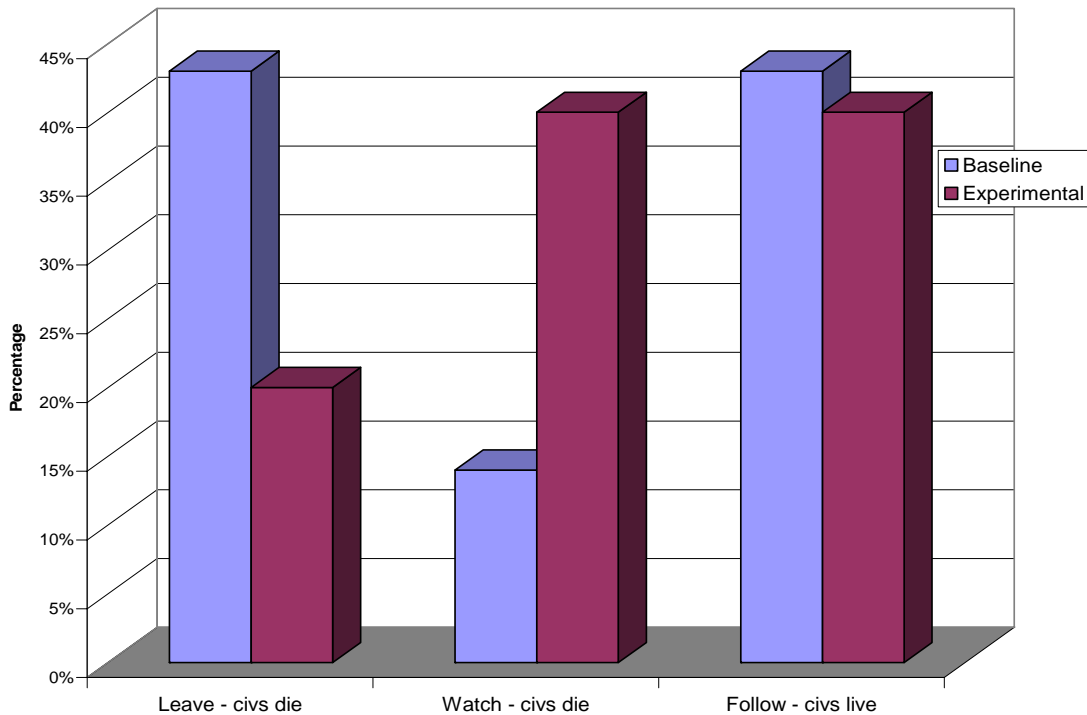
A critical question for this study was whether having had input from team members would influence the choices that teams made at this point in the scenario. Choosing to accept the personal risk of accompanying armed men into a forest in order to protect the lives of the civilians is a difficult team decision. Figure 16 shows the outcomes of those teams (12) who had a choice at this point in the scenario.<sup>29</sup>

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<sup>27</sup> These 3 resolutions stem from the course curriculum. As noted earlier, DS introduced a fourth option for some of the sessions. Eight teams were escorted out at gunpoint, 2 teams left after being at gunpoint, 3 teams watched at gunpoint. These sessions are excluded from this analysis.

<sup>28</sup> It should be noted the nature of the exercises prevent trainees from wholly leaving the situation because they know they are being observed by the DS and that they will be briefed at the end of the session. However, when teams motioned back toward the road after the Sgt had terminated the negotiation, this was recorded as the team having left the situation.

<sup>29</sup> Despite the fact that only 14 sessions were videotaped, the total number of outcomes (n = 25) equals the total number of sessions that had a resolution. Of those, 12 sessions had one of three resolutions, while the other 13 sessions had no choice. A member of the research team recorded the outcome of each session whether it was filmed or not.



**Figure 16: Resolving the moral dilemma**

When teams had not been prompted to work as a team (i.e., in the baseline condition), leaving and following were the two most prominent responses (more than 40%) with watching occurring in about 13% of the teams. When teams had been encouraged to work as a team, watching and following were equally common (at 38%) and leaving was the least common resolution (about 18% of teams).

### 3.5 Questionnaire Data

The next set of analyses explored the self-report questionnaire measures. Trainee responses on the questionnaire may provide some insight into their individual experiences on the human rights violation scenario. The questionnaire data was grouped into several categories including coordination, communication, and cooperation, trainees' perceptions about the scenario outcome, team huddles, and the Sgt's and their own emotion.

Each set of questionnaire items was first analysed by experimental and baseline conditions. There was only one significant difference between the perceptions of trainees prompted to work as a team and trainees who were not prompted to work as a team.

In the follow-up analyses, questionnaire items were also analysed in a 2 (role: team member or team leader) x 3 (resolution: leave, watch, follow) between group ANOVA. This analysis was done because another factor that might influence perceptions of the human rights stand is the relative position of team members, whether they were the primary person in charge or whether they were a more passive team member mostly observing the situation. So, the role of the team member doing the rating (i.e., either team leader or team member) was also examined in order to ascertain whether



team leaders, for example, had the same experience on the stand as team members. The second factor included in this analysis was the team’s resolution to the scenario (i.e., whether they left, watched or followed), as this could clearly influence their post-facto perceptions of the scenario. However, it should be strongly noted that the low Ns of many of these cells (e.g., N = 3) limits the validity of these analyses, and they should be taken as showing rough patterns only.

Each distinct set of questions is discussed in the sections that follow, with the means for the experimental and baseline condition shown and the follow-up analyses reported.

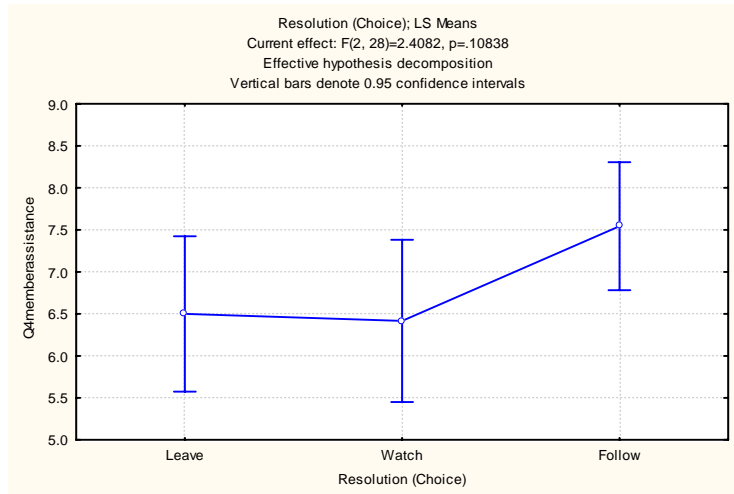
The first set of questions related to coordination, as shown in Table 25.

**Table 25: Coordination**

Question	Baseline			Experimental		
	Valid N	Mean	Std. Dev.	Valid N	Mean	Std. Dev.
My team members provided assistance when it was required. (Strongly disagree = 1, neutral =5, strongly agree =9)	25	6.8	1.5	9	7.0	1.5
My team members had a common understanding of the situation. (Strongly disagree = 1, neutral =5, strongly agree =9)	25	6.7	1.8	9	7.3	1.3
My team was able to adjust our strategy as the situation changed during the negotiation. (Strongly disagree=1, neutral=5, strongly agree=9)	25	6.0	1.9	9	5.9	1.7

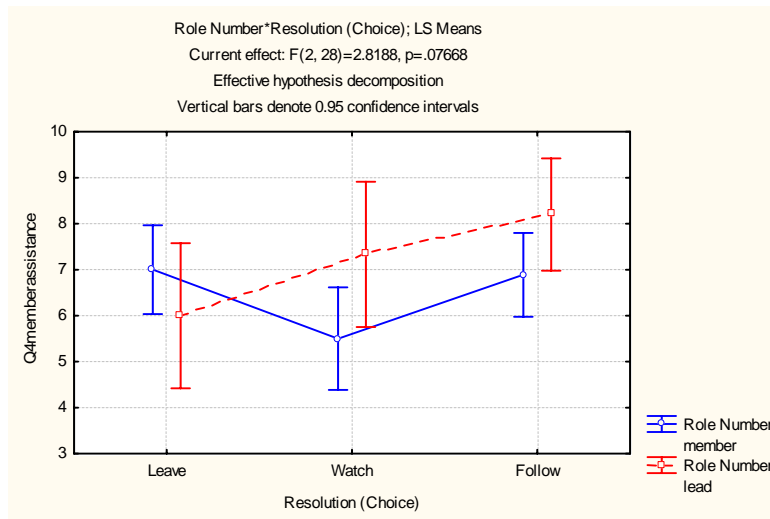
Consistent with the team behaviours presented in Section 3.2.1, trainees in both the experimental and baseline conditions agreed that team members backed them up (provided assistance when needed) during the negotiation (means 7.0 and 6.8 respectively). More specifically, 4 teams exhibited requesting/providing assistance behaviours during the team huddles, and they strongly agreed their team members provided assistance when it was required (means 7.5, 8.5, 9.0, 9.0). As mentioned above, the team leader typically requested assistance (“What should we do?”) from his or her team members, whereas the team members provided assistance.

Team member assistance was analysed in a 2 (role: team member or team leader) x 3 (resolution: leave, watch, follow) ANOVA, and showed a main effect as seen in Figure 17.



**Figure 17: Effect of resolution for team member assistance**

This main effect, however, was qualified by a marginal interaction, as shown in Figure 18.



**Figure 18: Role by resolution for team member assistance**

As shown above, another marginal trend emerged for team member assistance. Team leaders who watched or followed reported more assistance from the team than team members reported, while leaders who left reported less assistance from their team than team members.

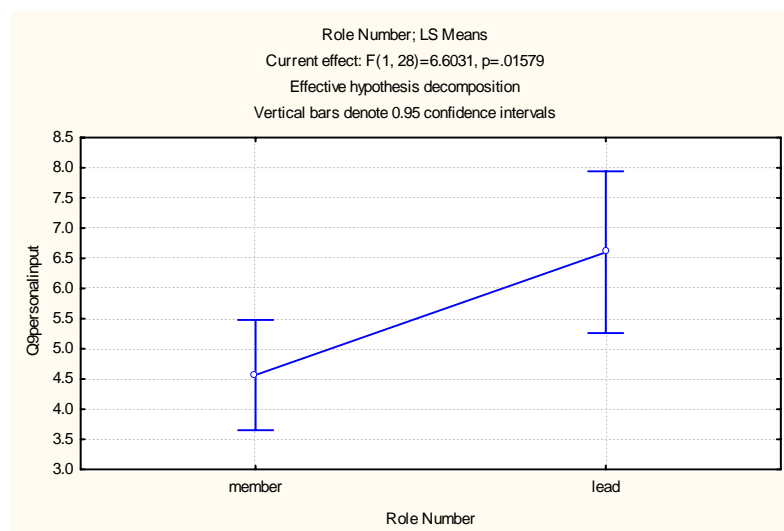
On the final coordination item, trainees reported their team adaptability as only slightly above the neutral point (experimental condition mean 5.9 and baseline condition mean 6.0). This was consistent with the actual team behaviour video analyses, which suggested few obvious occurrences of this adaptability behaviour.

Table 26 shows the means for the questionnaire items relevant to communication.

**Table 26: Communication**

Question	Baseline			Experimental		
	Valid N	Mean	Std. Dev.	Valid N	Mean	Std. Dev.
How much input did you personally have during these discussions [team huddles]? (None at all =1, some =5, right amount =9)	25	5.4	2.4	9	5.0	2.2
To what extent were the ideas that you gave your team actually used? (Not at all =1, moderately =5, completely=9)	25	5.4	2.7	9	4.6	1.9
My team shared critical information about the situation well. (Strongly disagree=1, neutral =5, strongly agree =9)	25	6.0	2.2	9	6.2	1.2
How many ideas to help resolve the situation did your team generate? (0 - >5)	24	2.5	1.5	9	2.3	1.2

As the results show, when considering the personal input during the team huddles, trainees reported that they had some input (means 5.4 and 5.0 for baseline and experimental conditions respectively), but that they might have liked to have had more input, as the means are considerably distant from “the right amount”. Other analyses exploring this question as a product of role shows that although there was no effect of condition, team leaders felt they had significantly more personal input during discussions than team members, as shown in Figure 19.

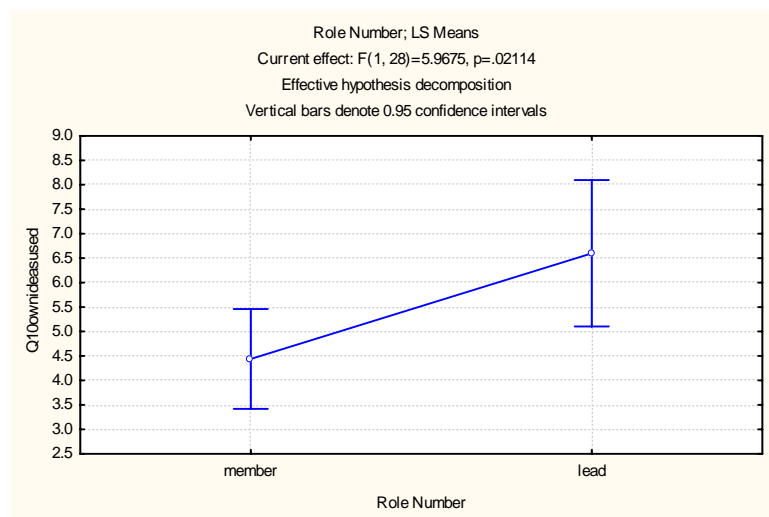


**Figure 19: Team member input**

The lack of main effect for condition suggests that having provided teams an opportunity to huddle together did not necessarily give them the sense of having more input into the situation, despite seemingly providing them some opportunities to interact with other teammates. This self-report

item, however, suggests that despite having a greater amount of input during the team huddles, team members still perceived their contribution as less than the leader.

As shown in Figure 20, when considering the extent to which the ideas trainees provided were used, team members reported their ideas had been used significantly less than did team leaders.



**Figure 20: Ideas used by team by role**

Despite having generated ideas during the team huddles, these may not have been implemented throughout the rest of the negotiation. Overall, trainees reported their ideas were only moderately used by the team (experimental condition mean 4.6 and baseline condition mean 5.4). This result is perhaps not unexpected, as team leaders spend the majority of the time negotiating with the Sgt and, consequently, their ideas are used far more often than team members. The team leader may believe he or she has a responsibility to generate and use his or her ideas, instead of accepting help from team members. This may be especially probable in teams who maintain a strict hierarchical structure (which was observed in 2 of 14 sessions filmed).

Though trainees agreed they shared critical information among the team, the means were close to neutral point for both the experimental condition and baseline condition (means 6.2 and 6.0 respectively). However, the team behaviour coding had indicated that information exchange, (including transferring information and requesting information) was the most frequently observed team behaviour during the team huddle. However, even though information exchange was the most frequent behaviour coded, team members still seemed to feel that they could have done an even better job of sharing information.

Teams reported having generated between 2 and 3 ideas to help resolve the situation. They were asked to describe these. Some included: walking together to police HQ; taking civilians into custody; radioing in and asking for back up; getting Sgt to stop hurting civilians; meeting with Sgt's boss; talking about peace agreement; and trying to connect with the police.

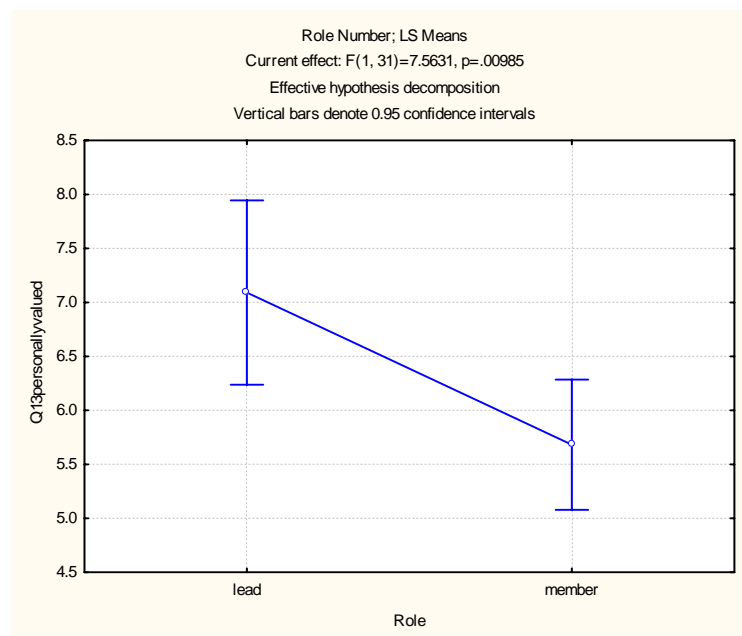
Results for cooperation items are reported in Table 27.

**Table 27: Cooperation**

Question	Baseline			Experimental		
	Valid N	Mean	Std. Dev.	Valid N	Mean	Std. Dev.
The negotiation went better because of input from my team members. (Strongly disagree=1, neutral =5, strongly agree=9)	25	5.5	2.0	9	6.4	1.4
I felt that my team valued my contribution to the negotiation. (Strongly disagree=1, neutral =5, strongly agree=9)	24	6.2	1.6	9	6.0	1.3

It appears that trainees agreed that the negotiation went better as a result of input from their team members. However, means hovered around the neutral point on the scale (experimental condition mean 6.4 and baseline condition 5.5). Similarly, trainees agreed that the team valued their contribution to the negotiation, but the means were close to the neutral point (experimental condition mean 6.0 and baseline condition 6.2). However, there was a marginal main effect and a significant main effect seen for role and resolution analyses.

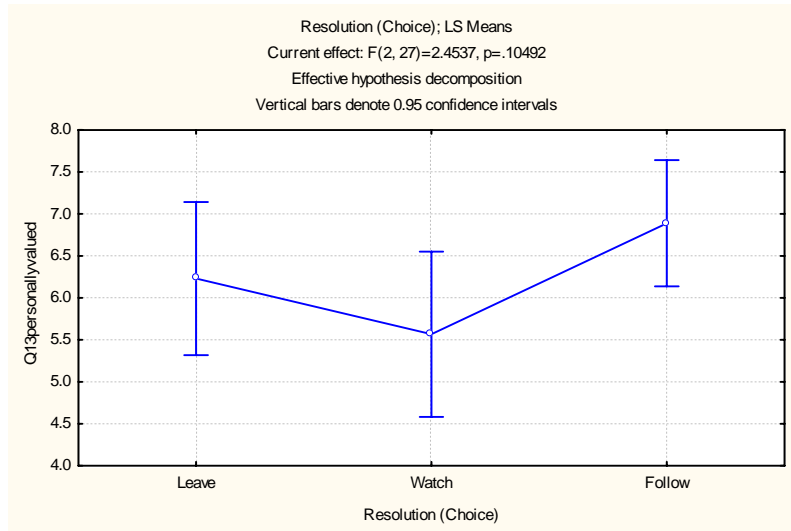
First, as shown in Figure 21, there was a significant difference between team leaders' and team members' perceptions of their team valuing their contribution to the negotiation.



**Figure 21: Team valuing personal contribution by role**

Team leaders reported their team valued their contribution to the negotiation significantly more than team members. This appears consistent with the previous finding that team leaders believed their ideas were used more than team members.

There was also a marginal main effect of the resolution, as seen in Figure 22.



**Figure 22: Team valuing personal contribution by resolution**

All team members saw their contributions as having been less valued by their team when the team had chosen to watch rather than leave or follow.

As a manipulation check, trainees were asked how many opportunities they had to discuss their options without the interference from the Sgt and if these helped or hindered the team’s performance. Table 28 reports the means.

**Table 28: Team huddles**

Question	Baseline			Experimental		
	Valid N	Mean	Std. Dev.	Valid N	Mean	Std. Dev.
How many times did your team have to discuss your options without the Sgt's interference? (0 - >5)	25	2.3	1.5	9	2.3	1.2
Did these opportunities help or hinder your team's performance? (Hindered = 1, no effect =5, helped =9)	25	6.2	1.5	9	6.4	1.3

Teams reported they huddled without the Sgt’s interference 2.3 times. Some teams had a spontaneous huddle at the end of the scenario which could account for the means. Teams in the experimental and baseline conditions were relatively neutral in reporting opportunities to discuss options as a team helped their team’s performance (means 6.2 and 6.4 respectively), though they did agree that these huddles helped rather than hindered the negotiation. Huddles seem to have provided an opportunity for teams to collaborate, share ideas, and generate a solution.

Questionnaire items also explored the style in which the team made decisions during the mission scenario. The question was aimed at understanding how each team made its final decision when the scenario was drawing to an end. Frequencies are shown in Table 29.

**Table 29: Team decision making**

Question 2: How did your team decide what to do?	Baseline (N=25)			Experimental (N=9)		
	Leader	Members	Total	Leader	Members	Total
Team leader made decision without consulting team	1	2	3	1	1	2
Team leader made decision after consulting team	3	9	12	0	2	2
Team made decision as a unit	3	4	7	1	3	4
Other	1	2	3	1	0	1

Overall, team leaders rarely made a decision without consulting the team. Teams reported that either the leader made the decision after consulting the team or the team made the decision as a unit. Video observations of the second team huddle suggest the team leader was engaged with his or her team as they were deciding what to do. Indeed, some team leaders deliberately requested suggestions from their team. What is worth noting is fewer trainees reported the team leader made the decision without consulting the team compared to either consulting the team first or making a team decision.

Looking within the teams, of the 12 teams who answered this question, only 1 team fully agreed on how the team made the decision. In three of these teams, all team members had completely different answers. The remaining 8 teams had the team leader agreeing with one team member on how the team made their decision.<sup>30</sup>

Trainees were asked a few questions about the scenario outcome. These questions related to motivation to redo the scenario, the quality of the scenario outcome and the quality of one's own personal response, as shown in Table 30.

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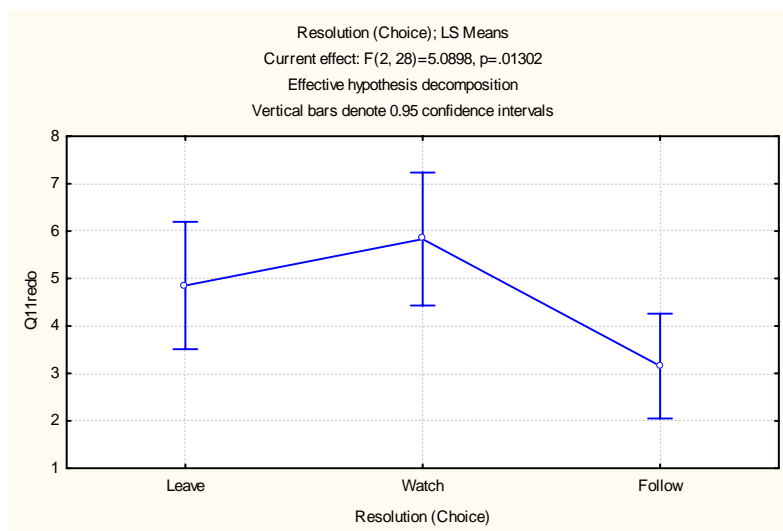
<sup>30</sup> This analysis excluded teams who did not have a choice to leave, watch or follow.

**Table 30: Ratings of scenario outcome**

Question	Baseline			Experimental		
	Valid N	Mean	Std. Dev.	Valid N	Mean	Std. Dev.
If you had the chance to redo this scenario, how much would you change <u>your own</u> actions? (Not at all=1, moderately=5, completely=9)	25	4.7	1.9	9	4.3	2.8
How would you rate the overall quality of <u>the outcome</u> of this situation? (Worst possible=1, neutral=5, best possible=9)	24	3.3	2.5	9	5.8	2.0
How would you rate the overall quality of <u>your response</u> to this scenario? (Worst possible=1, neutral=5, best possible=9)	25	5.5	1.5	9	5.4	2.3

The first question related to motivation to redo the scenario showed slightly (but not significantly) higher means for teams in the experimental condition. The role and resolution analyses showed a marginal effect and a significant effect.

First, the motivation to redo the scenario was significantly influenced by the actual outcome of the scenario, as shown in Figure 23.



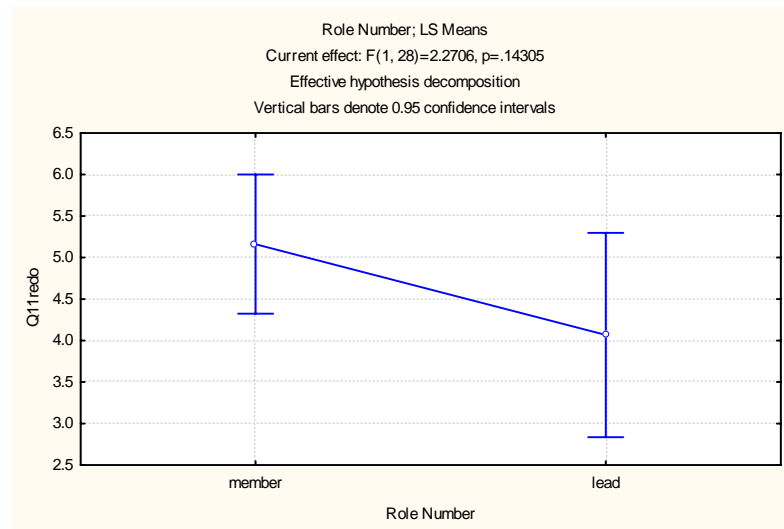
**Figure 23: Motivation to redo scenario by resolution**

This figure shows teams who watched were significantly more likely than those who left or followed to want to redo the scenario. This finding cannot be explained on outcome because those sessions where teams either left or watched ended with the civilians being shot. Those who followed, on the other hand, ended up saving the lives of the civilians. So, though it may have been a particular tough negotiation for these teams, it ended well. Perhaps those who chose to watch may want to redo the scenario so that they can make a more definitive decision. Teams who followed or left made a decision, and remained together as a team. Watching the civilians enter the



forest might indicate that trainees were undecided about what to do. For example, in one instance, one team member began following the police and the civilians until the team leader called him back. At the end of this particular session, observed team behaviours suggested they were not in full agreement as to what they should be doing. Team cohesion may have been impacted by watching. Teams who left wanted to redo the scenario marginally more than teams who followed.

As shown in Figure 24, there was a marginal difference between team leaders' and team members' motivation redoing the scenario.

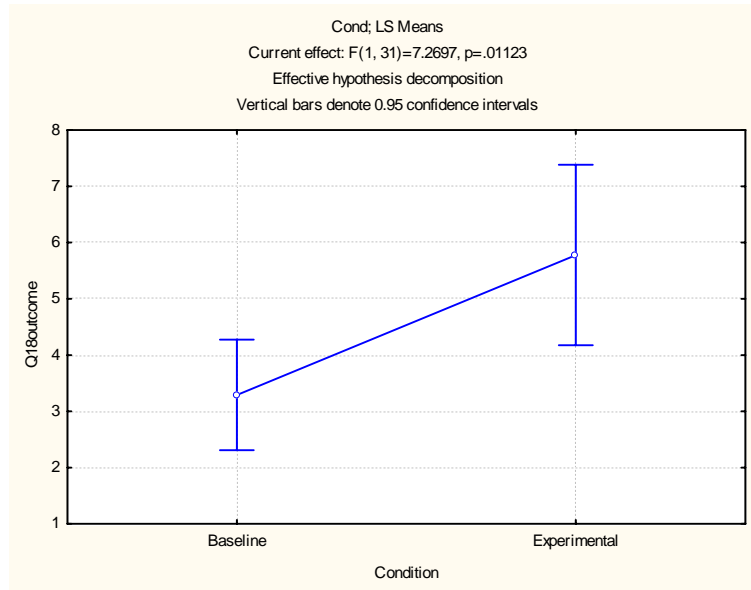


**Figure 24: Motivation to redo scenario by role**

When provided an opportunity to explain what trainees would do differently, some team leaders suggested they would involve the team more (e.g., “more conversation with my team”, “probably consult with my team more”, “convened with my team more”).

Similar to the previous two studies (Thomson & Adams, 2007; Thomson, Adams & Waldherr, 2007), team members were marginally more motivated to redo the scenario than team leaders. When the teams who did not have a choice to leave, watch, or follow are included, this trend disappears. It is impossible to know whether having had more opportunities (in both conditions) to share their ideas with the team might underlie this finding. In both cases, the Sgt left the teams alone twice for approximately a minute during which they all had an opportunity to brainstorm and share their ideas.

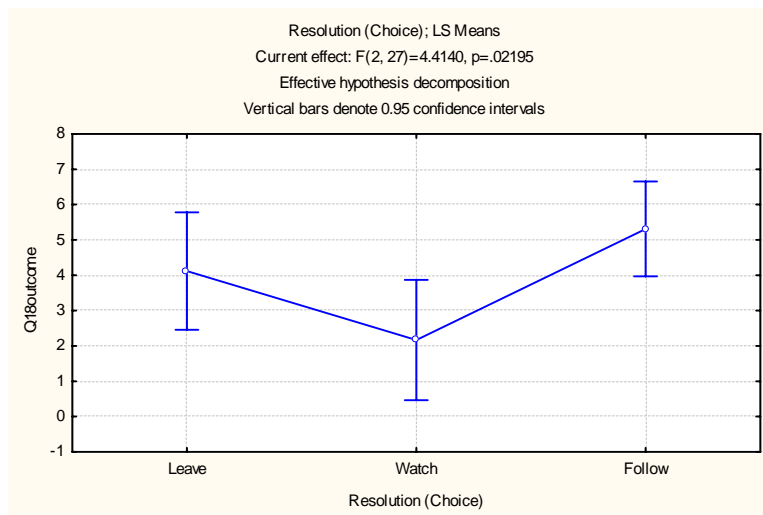
Ratings of the quality of the scenario outcome yielded the only significant difference between teams prompted to “work as a team” or not, as shown in Figure 25.



**Figure 25: Condition by quality of outcome**

Trainees who were not prompted to work as a team rated the quality of the outcome below the neutral point, while teams who were prompted rated it above.

The role by resolution analyses showed that team members' ratings of the quality of the outcome were dependent on the outcome of the scenario, as shown in Figure 26.



**Figure 26: Resolution by quality of outcome**

Teams who followed the civilians rated the outcome more positively than teams who left or watched. Teams who left the civilians rated the outcome more positively than teams who watched. Consistent with teams wanting to redo the scenario and the first study, teams who watched rated the quality of the outcome the most negatively. Again, explaining why those in the watch condition significantly differ from those in the leave condition is important because in both cases the civilians are shot.

Finally, trainees were asked about the Sgt’s emotion during the scenario as well as their own anger with the Sgt, as shown in Table 31.

**Table 31: Emotion**

Question	Baseline			Experimental		
	Valid N	Mean	Std. Dev.	Valid N	Mean	Std. Dev.
How angry was the Sgt during the mission? (Not at all=1, moderately=5, extremely=9)	24	6.8	1.4	9	5.9	1.8
How angry <u>were you</u> with the Sgt during the mission? (Not at all = 1, moderate =5, extremely =9)	24	5.3	1.9	9	5.3	2.8

Trainees in both conditions found the Sgt to be moderately angry. They also reported moderate anger with the Sgt, but this was less than the perceived anger of the Sgt. Trainees that were not prompted to work as a team rated the Sgt slightly (but not significantly) angrier than teams who were prompted. Despite the Sgt’s anger, trainees showed many attempts to build a positive relationship with him during the negotiation.

### 3.6 Summary of Results

Overall, these results suggest that the experimental manipulation did not appear to have a significant impact in the current study. Behaviours at both the team and individual level were consistent in the experimental and baseline conditions. There were also very few differences in scenario resolutions, and questionnaire items attributed to the manipulation. In short, providing teams an opportunity to collaborate and prompting them to work as a team did not appear to have a substantive impact on either their actual behaviours (at the team or individual level), their perceptions of the training scenario, or on the resolution of the training scenario.

The fact that the experimental manipulation apparently did not prompt teams to perform differently, however, does not mean that no important patterns were noted in the many different forms of data collected, merely that these patterns were not likely a product of the manipulation. Moreover, it is also critical to understand some of the possible reasons behind the failure of the experimental manipulation in order to adequately interpret the results of this study. These issues are considered in detail in the discussion that follows.

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## 4 Discussion

This study was initiated in response to the findings of the two previous studies, in which it was noted that team members were consistently more motivated to redo the scenario (if provided the opportunity) than team leaders. One possible explanation for this finding was team members may not have been able to provide adequate input into the negotiation. In typical negotiations on the human rights stand, team members observe the interaction between their team leader and the Sgt, and typically have few opportunities to discuss their ideas with their team leader. This study, then, attempted to provide an opportunity for team members to make more of a contribution to the negotiation both by scripting a prompt for teams to work more as a unit as well as by providing two team huddle opportunities during the negotiation. Team huddles were conceived as a means for team members to share ideas with their team leader and simultaneously make the negotiation experience more collaborative and inclusive for teams.

Some team behaviours, such as correcting team members' errors, and sharing and pursuing mission goals (i.e., maintaining the flow of questioning by asking related questions one after the other), were more common during the full negotiation than in team huddles. Analysis of video data showed that majority of teams adopted a relatively hierarchical approach to the negotiation with the team leader continuing to maintain control. Team leaders accounted for an average of 68% of all negotiating behaviours, while the rest of the team members accounted for 32%. By comparison, there were only a few teams who adopted a lateral structure in which team members had relatively equal input as the team leader throughout the negotiation. However, of all of the coded trainee behaviours (both team leader and team member) during the negotiation with the Sgt, only 2% included direct interactions between team members and team leaders. Most of the trainees' behaviour was directed toward the Sgt (98%), and team leaders accounted for the majority of these interactions. Team members accounted for 33% of all of the observed trainee behaviours during the negotiation (excluding the team huddles), but the behaviour that they did display was directed toward the Sgt and not toward other teammates. This finding may indicate simply that wholly collaborative teamwork is difficult to realize in the context of an intense negotiation.

On the other hand, the team huddles seemed to provide more opportunity for team members to contribute input to the negotiation. As team behaviour analysis showed, team huddles seemed to provide team members an opportunity to share ideas and suggest strategies for resolving the human rights violation scenario. Given the limited team interaction during the negotiation, team huddles most often represented the first time that team members could consult with their team leader, as this leader had been fully engaged with the Sgt up until that point. Teams in both conditions readily exchanged information (transferred and requested information, gave suggestions), managed roles (issuing commands, confirming roles), and backed each other up (provided or requested assistance when required). Teams also showed strong evidence of shared common understanding (desire to remain part of the team, desire to share and pursue mission goals) and physical cohesion (physical proximity) during the team huddles. In fact, this video coding suggested that the input of team members was much closer to that of team leaders during the huddle. Team members accounted for 64% of the observed team behaviours during these opportunities whereas team leaders accounted for 36%. During team huddles, team members gave four times as many suggestions than the team leaders. Team members also exchanged information more frequently (62%) than did team leaders (27%). They transferred and requested more information than the leader. They also went outside their role and issued commands either to another team member or to the leader. Of all the observed

commands during the team huddles, members were accountable for 37% of them, whereas 63% of commands were attributed to the leaders. It is also critical to note that the majority of teams used the team huddle to discuss their options as the scenario seemed to be drawing to a close. Importantly, analysis of the video data showed that many teams took the opportunity to decide what to do as the scenario was coming to a close. This suggests that collaborative decision-making may have been facilitated by the provision of a team huddle. According to the team huddle results, then, one could argue that team members played a significant role in fostering both a common understanding of the situation through transferring and requesting information as well as giving suggestions during the huddles.

Comparing these behavioural results with the perceptions of team leaders and team members on the questionnaire items exploring all team members' perceptions showed both consistencies and inconsistencies. Responses for some of the questionnaire items seemed to parallel the observed behaviours during the negotiation. As noted earlier, team behaviours were coded both during the negotiation as a whole (excluding team huddles) as well as in the team huddle separately. To their credit, teams exhibited back-up behaviour during the team huddles and, to a greater extent, in the overall negotiation, and this is supported by questionnaire findings related to perceived support. Back-up behaviour has been argued to be especially important in situations of high workload (Wilson et al., 2007). Negotiating with a confrontational partner in a high stress, time sensitive situation likely exacts a large toll on the team leaders' mental capacities. This is especially true in the case of the human rights violation stand because the Sgt is angry, uncooperative, and most importantly holds all of the power. According to the literature, teams need to monitor one another so as to provide assistance when members' show deficiencies or slips in performance (Wilson et al., 2007). Teams in this study demonstrated back-up by correcting team members' errors and providing assistance. In a couple of cases, team members temporarily relieved team leaders of the negotiating task. This typically occurred in teams where the team leader was from a foreign country and spoke English as a second language. This back-up behaviour demonstrated strong team adaptability. However, the majority of the observed back-up behaviour was team leaders requesting input from team members. Team leaders demonstrated their ability to monitor their own performance by using the resources they had available to them. Moreover, teams who exhibited back-up behaviour strongly agreed on questionnaire measures that their teammates provided assistance when it was necessary, suggesting they were attuned to this particular team activity.

At several other points, however, the behavioural data and the self-report data was more inconsistent. Despite their somewhat larger role during the team huddles, team members reported they had significantly less input to the negotiation as a whole than team leaders. This suggests that the questionnaire response may have been guided more by what happened during the negotiation overall (lasting about 12 minutes) than by what happened during the two team huddles (lasting about 2 minutes combined). In fact, giving suggestions to the team showed a relatively low frequency during the negotiation ( $n = 8$ ) compared to its frequency during the team huddles ( $n = 42$ ). Perhaps not surprisingly this suggests that team members took a somewhat more observational role during the negotiation proper, but took on a more active role in the brief team huddle periods provided to them.

The questionnaire data also supported the idea that the suggestions offered by teammates in the huddles may not have been implemented by the leader during the negotiation. Team members reported that they thought the ideas they offered (at any point during the negotiation) had been used significantly less than the ideas of team leaders, despite having them having provided four times more suggestions than team leaders in the team huddles. Pressure on the team leader to

successfully negotiate with a combative negotiating partner could block ideas presented by team members or at least hinder the ability to process them, forcing the team leader to rely more readily on his or her own resources. Moreover, team members also reported that they felt that the team valued their contribution to the negotiation significantly less than the contribution of team leaders.

There was also evidence that team members were marginally more likely to want to change their own actions if they had the chance to redo the scenario. Although somewhat weaker, this pattern was consistent with that seen in the first two studies. The addition of team huddles into the negotiation, therefore, did not seem to lessen this desire. A few team members reported they wanted to have more direct involvement in the negotiation. For example, one stated “I would prefer not to have acted as security, but been part of the negotiations.” Another reported the team should have “[gotten] together to assess the situation as a team [and] identify areas of intervention for each member to avoid antagonizing of one team member only”. So there is indication among team member trainees that they did not have as much input as they would have liked. Indeed, at a strategic level, it could be argued that having additional team members providing their input into the negotiation may help mitigate hostilities between the team and the Sgt. Interestingly, some of the team leaders noted that if provided the opportunity to redo the scenario, they would have solicited more input and consulted more with the members of their team. These results suggest that both team members and team leaders see greater team involvement as a more desirable option if given the chance to refine their approaches in the future.

Another inconsistency in observed team behaviours versus self-reports emerged with respect to sharing critical information. Teams (both team leaders and team members) agreed that they had shared critical information, but they did not feel this to be especially strong, as these means were close to the midpoint of the scale (experimental and baseline conditions). This is also somewhat inconsistent with the team behaviour results. The most frequent activity teams engaged in during the huddles was information exchange (73% of all coded behaviours during the team huddles). These data suggest that teams shared information well. Perhaps teams did not think the general information about the situation which they shared was “critical”. If this is the explanation for the moderate self-report ratings, then this raises the question what would be considered critical information to trainees in a situation such as this. Is there information that they view as more critical than that which they shared with each other during the team huddles? If so, what would this information be and how might it impact the overall performance?

These apparent “disconnects” between the perceptions on the questionnaires and the actual team behaviours seen on the videotapes is worthy of more discussion and investigation. Of course, there are many possible explanations for these findings. They may reflect the fact that team members genuinely do not believe that they have enough influence on the negotiation and opportunity to contribute to it. Perhaps being in a subordinate position in such as emotionally charged situation is inherently difficult, independent of all opportunities to contribute. This may be particularly true because the military personnel that complete the training course are officers who are probably accustomed to being somewhat more in control in such situations. Or these findings could also reflect simple hindsight bias. Trainees give their perceptions on questionnaires after the resolution of the scenario. Particularly if the outcome is not good (i.e., the civilians die), they are likely to feel frustrated that they may not have contributed (or may not have been able to contribute) enough or that things could have been different if they had more opportunity to be in charge. From another perspective, the team behaviours coded from the videotape might not have been the kind of contributions that they wanted to make. As such, even if they are seen to have initiated many different interactions with other teammates, they may not have been able to provide the kind of

input that they really would have liked to have provided. These possible explanations may account for some of the inconsistency between self-reports and team behaviour content analysis regarding input. Although the current study operationalized input primarily in terms of ideas offered to assist in the negotiation, input could be defined in terms of adopting a different negotiation approach or style. Some team members suggested that a different approach to the negotiation might be a way in which they would change their behaviour. For example, one reported he would “be a bit less assertive [and] be careful about inadvertently insulting [the] Sgt”. Another responded “perhaps a more open, friendly approach might work better”. One suggested be “more deliberate in questioning”, where another simply stated “change the approach”. Although this study considered idea production and team member input as prime indicators of the usefulness of the team huddle, other factors may well be more critical antecedents to team members feeling that their contributions were worthwhile. Whatever the case, greater understanding of the experience of team members and team leaders in the midst of this training scenario may help to better define their optimal roles.

As teams begin to wrap up the scenario, they are faced with a tough choice. They must decide among one of three options. They can follow with the civilians and the police into unknown woods, they can watch as the civilians are led away by the police into the woods, or they can comply with the Sgt’s demand and leave the stand while the police lead the civilians into the woods. In this study, teams in the baseline condition most often chose to either leave or follow; whereas teams in the experimental condition favoured watching or following; leaving for these teams was the least common option.

Teams who followed the civilians rated the outcome more positively than teams who left or watched. Teams who left the civilians rated the outcome more positively than teams who watched. Consistent with the first study, teams who watched rated the quality of the outcome the worst and as a group appeared most dissatisfied with the outcome. Questionnaire data also showed that teams who watched were marginally more likely than those who left or followed to want to redo the scenario. These findings for the watch condition cannot be attributable to the civilians dying, because they also die in the leave condition. As we have noted in previous studies, this consistent finding may stem from the fact that trainees who have decided to watch showed the most indecisive response. On one hand, they did not wholly disengage from the plight of the civilians and leave the civilians to their own fate, but they attempt to maintain line of sight to the civilians as they are lead away. On the other hand, they also did not make the risky choice to commit to following the civilians being lead into the dense forest. Determining the psychological underpinnings of these consistent findings is an issue worthy of further investigation.

Even on the individual behaviours coded from the video data, there were few differences among teams in the baseline and experimental conditions. Looking at the individual negotiation behaviours, the most commonly observed general activity was assessing the situation. This is not surprising given that trainees’ role is to collect information. Two behaviours under this general activity, asking general questions and asking situation specific questions, were further broken out into either open ended or closed ended. During SME coding validation, instructors showed an interest in this breakdown because they encourage students throughout the course to use open ended questions as a means of getting to know the interests of negotiation partners. Sixty percent of the questions trainees asked were closed ended questions and 40% were open ended questions.

There were also a couple of encouraging patterns that emerged over the course of the 3 studies. There has been gradual growth in positive relationship building behaviours. Results for the current



study report 10% of all coded negotiation behaviours fall under this behaviour, whereas the previous studies reported 5% and 9% (Thomson & Adams, 2007; Thomson, Adams & Waldherr, 2008, respectively). Consistent with an increase in positive relationship building behaviours, there has also been a decrease in negative relationship building behaviours. The current study reports 9% of all coded behaviours are negative relationship building behaviours compared to 19% and 15% seen in the other two studies (Thomson & Adams, 2007; Thomson, Adams & Waldherr, 2008, respectively). As well, trainees have increased the instances of searching for alternatives. In the current study, teams exhibited this behaviour 6% of the time, whereas in the first study teams exhibited this behaviour 1% of the time (Thomson & Adams, 2007) and in the second study 5% (Thomson, Adams & Waldherr, 2008). Although subtle, these findings are encouraging as they more closely reflect the CF pre-deployment training objectives regarding negotiation.

It is difficult to know how to explain the ineffectiveness of the experimental manipulation. One possible explanation is that the manipulation itself was too subtle. Perhaps the fact that both teams had the same opportunity to huddle made the two conditions less distinct than intended. Although the intention was that teams would naturally be relatively unmotivated to work as a team in the baseline condition, this did not appear to be the case. Observations during classroom lectures and debriefs suggest that instructors are addressing team activity to a greater extent than in the past. Increased emphasis on teamwork during current CF pre-deployment training debriefs of classroom exercises and lectures, therefore, may have made the team prompt rather redundant, and indeed may well have overwhelmed our experimental manipulation. One way to determine whether there was more evidence of team behaviours after being trained to work as a team is to compare the current study with the previous two studies (Thomson & Adams, 2007; Thomson, Adams & Waldherr, 2008). The effectiveness of the experimental manipulation may also have been negatively influenced by changes within the very nature of the training course. Just before the first data collection period for this experiment, the course was re-designed to be pass/fail rather than more qualitative. Thus, more emphasis was placed on grading the primary leader for each stand on the day long training exercise. The potential impact for the human rights violation stand is that the team leader is increasingly required to take an active role in the negotiation, as this leader knows he or she is actually being graded by the DS. Of course, it is impossible to know with certainty which factors influenced this study. Although the human rights violation scenario offers many unique opportunities for examining team behaviour in a very complex environment, the fact that it is, first and foremost, a training exercise that necessarily puts research (and the optimal levels of experimental control) of secondary importance.

## 4.1 Training Implications

The results from the current study have a number of notable training implications. The first training issue stemming from the apparent inconsistencies between the questionnaire and behavioural coding is it might be important for training to put more emphasis on describing the many different roles within a team. If the findings of this study are actually indicative of how team members generally feel after completing the human rights training scenario, in that they report more motivation to redo the scenario, that their input was used less than that of their team leader, and that their contributions to the negotiation were not valued, it might be reasonable for trainers to be concerned about this finding. Previous instructors have argued that the human rights violation scenario should be an opportunity for learning, of course, but many have noted that they try to give positive and constructive feedback in order to avoid discouraging personnel or causing them to doubt their own skills and abilities just prior to actual deployment. If the finding in this study is

true, however, it might be important to anticipate the fact that personnel not in active lead of this kind of a situation might feel regret and to second-guess either themselves or their teammates if the scenario ends negatively (e.g., the civilians are killed) and perhaps to see their failure to contribute as one of the contributors. Perhaps providing more articulation about the importance of even secondary roles, and defining these roles as critical forms of teamwork and contribution in their own right might be helpful. Alternatively, training a more lateral rather than hierarchical team approach earlier in the training program may help to address this problem (if trainers identify this as a meaningful goal).

This study focused on a number of critical team processes (e.g., coordination and communication) identified in the literature as being critical antecedents to excellent teamwork. For the longer term, understanding the team processes that are most relevant in this human rights violation scenario (and in military contexts more generally) would be an important contribution. Focus groups with military SMEs showed that they believed teamwork to be very critical and likely to help the overall negotiation with the Sgt (Thomson & Adams, 2008). However, there were limited opportunities to articulate exactly what forms of teamwork these CF pre-deployment instructors see as most critical. Presumably, teamwork can be understood on a number of different levels and has many different nuances within military contexts. Determining the ideal conceptualization of teamwork within this setting is critical. For example, although training seems to emphasize the importance of working as a team, it is not entirely clear how this should be integrated with the hierarchical nature of many military teams. In teams where roles are clearly defined to (e.g., IC and 2IC), what should a 2IC (or other teammates) do when the IC is clearly not being effective? The expectations for back-up behaviours in a military team might arguably be somewhat different from those in a less hierarchical team. How does collaborative decision-making enter into the equation in operational situations that are highly stressful, time sensitive, and confrontational? Is team collaboration equally positive in any context? Another critical question is how team leaders can best utilize team resources to achieve the best performance while maintaining good team dynamics. At least in the short term, teams can perform very well without having all team processes at a high level. In the longer term, however, working within teams with low levels of cohesion and no shared sense of purpose, for example, is likely to pose a very different set of challenges. Given the diverse nature of the teams to which military personnel are likely to deploy, providing more elaborated instruction about team dynamics and balancing the different stresses on a team may be very helpful.

One question that needs to be addressed is what teamwork behaviours are considered optimal and suboptimal in the context of military training and high conflict situations. Again, the academic literature suggests increased teamwork (i.e., coordination, communication, cooperation) leads to greater performance. An important next step, therefore, is identifying team behaviours that CF pre-deployment instructors believe are critical in this particular operational context (i.e., human rights violation scenario) and being able to predict (and test) their actual impact on overall team performance.

Training should also further elaborate the impact of diverse culture in multinational teams and on ways in which teams can work to adapt to this diversity. Clearly, within a situation that is high stress, time sensitive, and confrontational like the human rights violation scenario, the ability to communicate seamlessly and confidently may be a challenge for trainees less familiar with the English language. In this study, cultural diversity within teams impacted team behaviour. In one example, a team led by a leader from another country showed team members exhibiting high levels of back-up behaviour, presumably to help the team negotiate more adeptly. Team members provided greater assistance during both the negotiation and the team huddle, and the team seemed

to shift from a more hierarchical structure to a more lateral one during the negotiation. Although CF personnel in this training course can typically use their first language, they will often be working in countries where citizens speak a different language (i.e., Darfur, Congo) when deployed.

In general, understanding how cross-cultural differences impact team activities, such as conflict resolution and negotiation, when confronting issues in operations will be important for operational readiness. Indeed, CF personnel will likely become reliant on team members who understand the language and the culture of the host country (a.k.a. cultural proximity; Jones, 1991). Reading a situation may be a challenge if cultural nuances are not shared. For example, one CF pre-deployment instructor relayed to the research team an anecdote that emphasized the danger of not understanding cultural subtleties. He explained that two CF personnel were discussing matters with local villagers but they did not recognize their approach was having a negative effect on those around them. A third teammate, who had knowledge of the culture and had been assessing the situation, recognized the situation was deteriorating. He quickly rounded them up without detailed explanation and ushered them into the vehicle. Once out of danger, he explained their behaviour had infuriated the local people and caused safety and security to become an immediate issue. Having teammates with cultural proximity will be an important asset for back-up behaviour. However, knowing when one should step up and how might be something to develop and hone during CF pre-deployment training. As Wilson et al. (2007) report, empirical findings suggest back-up behaviour can boost performance and reduce error.

For training purposes, then, helping trainees to understand the potential impacts of working with teammates from other nations would be an important training contribution. For example, given that cultural diversity can pose some challenges, providing compensatory strategies and heuristics may be very adaptive. To some extent, the focus of current CF pre-deployment instructors is already helpful, as it emphasizes the importance of body language. Whether with a negotiation partner or with a teammate, having as many different strategies as possible to promote good communication is a worthy training goal. On the other hand, one of the subtle impacts of culture which may or may not currently be reflected in current training is the fact that people from different cultures can also provide unique insights and perspectives to complex problems. What does seem clear is that more training emphasis on how teams can best utilize the resources they have at their disposal to be most effective in negotiation tasks may be beneficial. As such, providing instruction around how to mitigate some of the more obvious challenges as well as direction about the potential benefits of being able to tap the unique strengths within diverse teams might also be helpful.

Some of the results seen for individual level behaviours also have potential training implications. As in previous studies, assessing the situation (especially seeking situation-specific information) was the most common general negotiation activity trainees' exhibited. During coding validation focus groups, SMEs underscored how vital it was that trainees ask open ended questions as these encourage more elaborate responses from the negotiation partner, and typically yield more information (Thomson & Adams, 2008). In response, for the current study, trainee questioning was broken out into either open or closed ended questions. Results showed, for both general and specific information seeking, trainees asked more closed ended questions (60%) rather than open ended questions (40%). This finding suggests that greater attention to this issue in the course of the pre-deployment training may be necessary for trainees to adequately learn how to ask mostly open ended questions.

Another potential way forward is evaluating the impact of CF pre-deployment training through feedback from previous trainees following their deployment. Evaluation of the current CF pre-deployment training program could start by eliciting feedback from military personnel as an exit interview and analyzing the responses. As well, it would be highly beneficial to elicit from those CF members coming back from peace support operations the impact of their CF pre-deployment training on their activities in operations. For example, did they confront or witness situations that paralleled their training, especially like the human rights violations, in which they had to make an ethical decision? How did the training help with this? Did it in fact provide operational readiness and contribute to mission effectiveness? As a whole, then, there are many different training issues that could be addressed in future work with this Canadian Forces base.

## 4.2 Research Implications

Many different issues could be addressed in future research exploring teamwork behaviour. One of the explicit goals of this research is to be able to contribute to the CF training cycle and to provide feedback about the negotiation behaviours that trainees' exhibit and the decisions that they make during this scenario. This section explores a range of research implications and future possibilities related to this study and the other studies in this series.

After having completed three complete research projects, it seems important (for both research purposes and training purposes) to work with military SMEs to understand collaborative team behaviour in a number of different operational contexts. What are the appropriate team behaviours in this particular context? What does teamwork look like? Are there specific team level behaviours not coded in this study that CF pre-deployment instructors would want to see in negotiations in situations such as the human rights violation stand? In this study and following on from previous work in the area, we described teamwork as the observable behaviours of Coordination (including communication) and Team Dynamics (including cooperation). All of the team behaviours listed in the coding scheme were observed in the current study. However, given the complexity of teamwork, there may well be key team behaviours that are missing from the current coding scheme that may be particularly relevant within this context.

Another potential research issue is how the involvement of many different team members would actually impact on team performance. Although this study attempted to enable higher levels of teamwork, a critical issue to explore is whether having a more egalitarian team approach actually leads to teams being more effective particularly when negotiating in a stressful situation. There are potentially both pros and cons. On one hand, having a wider range of expertise feeding into the negotiation situation may promote better outcomes. On the other hand, there is also potential for the negotiation to be more disjointed if different team members take discrepant approaches to the negotiation. However, in teams with more lateral structures, it seems likely that team dynamics may play more of a role in negotiation performance. Unfortunately, given the small samples size in this study, it is difficult to ascertain the impact of hierarchical vs. lateral approaches to the negotiation.

Even though the results of this study suggest that the intended experimental manipulation was likely not effective, the approach to understanding the team level factors in a real world setting is also one worth more attention in the future. As this report is written for researchers in the relatively newly formed Collaborative Behaviour and Learning Section at DRDC Toronto, it provides some important information about the potential challenges of capturing both individual and team level behaviours. As we have noted in other work (Sartori, Waldherr and Adams, 2007), the most

prominent criticism of existing measures of teamwork relates to the relative lack of measurement validation. Prominent researchers have argued that measures must demonstrate validity (i.e., construct, content, and face) and reliability (i.e., criterion and inter-rater) (Bakers and Salas, 1997), and these issues have not often been addressed in many existing team measures. For this to occur, of course, researchers have to give more attention not just to developing measures in order to help answer their specific research questions, but to systematically showing that these measures are valid. Unfortunately, at least to this point, researchers have focused more on research questions around teams rather than on the measures that they use. For example, as Baker and Salas state (1997, p. 345), “evidence for the internal consistency of team performance measurement tools has been less than encouraging”. This suggests that devoting more attention to the development and validation of measures of teamwork would be a most worthwhile research activity.

It is important to note that, although the program of research stemmed from interest in ethical decision-making, the human rights violation stand and the CF pre-deployment training course in general have shown a lot of other potential for studying several other issues critical to collaborative behaviour. For example, the training course in which this work has been embedded for the last few years regularly brings together military personnel from a variety of nations to complete their CF pre-deployment training over the course of almost a month. From a research perspective, this situation offers a unique opportunity to address one of the perpetual gaps in the team literature. As we have noted in a previous review (Sartori, Waldherr and Adams, 2007), one of the persistent gaps in team research is that it is typically only cross-sectional rather than longitudinal. Given that these teams are formed by course instructors at the beginning of the course, they work together over the course of 4 weeks and seem to quickly form cohesion as a team. In the course of our research observations, for example, trainees are observed sitting in close proximity within the classrooms, working together to make decisions as a team even outside of training scenarios. The process by which these often disparate individuals come to form into a team, and how teams gel and learn to coordinate their interdependent activities is a fascinating issue worthy of further attention. Exploring this issue, of course, would likely have to be observational rather than experimental, and would require relatively close access to the teams at all possible stages. An observational as well as questionnaire approach at pre-defined stages would be possible first steps. Obviously, an unlimited number of research questions could be asked. For example,

- What individual difference factors contribute to team process and performance?
- What team processes are the best predictors of team performance?
- How exactly do teams gel and do all teams necessarily use the same process?
- To what extent good team processes (e.g., good communication and cohesion) predict team performance?

These questions are obviously dependent on there being meaningful indicators of team performance. Given our past observation, the experienced training instructors seem to be in a very good position to rate the potential and actual performance of teams. As noted earlier, this kind of approach is clearly dependent on getting the kind of access needed to observe teams in a variety of training situations, perhaps both within the training course as well as in their time off, and would again rely on the goodwill of the personnel in training and that of the trainee teams themselves. As such, they would need to see some tangible benefit from this research for their training program. It would require further discussion with them to know exactly how this could contribute to their training goals.

One possible research theme for this kind of longitudinal research (and consistent with an ongoing line of research) is that of trust in teams. As we have noted in previous work, trust research is also typically constrained to “a single point in time” or relatively short periods of team interaction to gauge trust within teams. This context provides a rich opportunity to study both category-based trust from the point before trainees are even formed into teams, and their expectations and preconceptions about teammates from other cultures to person-based trust and the factors that promote and hinder it. The training course offers a number of real-life training scenarios (such as the human rights stand) that are very relevant to trust within teams. Even observations of defensive monitoring behaviours in this study showed possible trust-relevant behaviours. Having access at a deeper level would help to link these possible behaviours with trust as a psychological state.

Research activities could also centre on working within multinational teams in operations. For example, what was it like working in teams that were multinational? Do cultures differ in “task-related knowledge”, i.e., “shared understanding of teamwork” (Wilson et al., 2007, p. 250)? If not, how did this impact team collaboration? Were there competing goals and how did this impact team cohesion? What cultural factors impact team performance and mission effectiveness?

Looking at this series of studies as a whole, this research has provided a very rich source of data and exploration of some compelling and important questions. The DRDC Toronto and Humansystems research teams have worked together to surmount very difficult data collection challenges including the elements and complex technical issues as well as attempting to maintain the highest possible level of experimental control in a training environment. The team has worked to build and maintain a good relationship with the CF base training leaders and instructors that will hopefully be maintained for the long term. Most importantly, this program has provided the unique privilege of working with military personnel in a realistic training setting to explore complex issues of ethical decision-making, collaborative decision-making and negotiation skills.

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# Annex A: Voluntary Consent Form

## VOLUNTARY CONSENT FORM

Revised Protocol L-521, Amendment 2

*Research Project Title: Decision-making in Operations: A Field Study Part III (Revised Protocol L-521, Amendment 2).*

Principal Investigator: Michael Thomson and Dr. Barbara Adams (Humansystems Inc.)

DRDC Toronto Principal Investigator: Dr. Megan Thompson

DRDC Toronto: Co-investigator: Dr. Matthew Duncan

I, \_\_\_\_\_ (name)

hereby volunteer to participate in the study, “Decision-making in Operations: A Field Study Part III” (Revised Protocol L-521, Amendment 2).

I understand that:

... the study will be conducted during one of the regular training scenarios at a Canadian Forces base (IDENTIFYING INFORMATION REMOVED). It addresses factors that impact on operational decision-making and will be used to optimize future training.

... my participation in this study is completely voluntary and I may undertake my training without participating in this study.

... I may refuse to participate in the study without prejudice and with no impact on my training.

... with my consent, I will be video- and audio-taped during the stand and immediately after the stand to identify optimal behaviours and communications occurring during the stand. Should any of my teammates refuse to be videotaped, no taping of my team will occur.

... the video and audio recordings of the sessions are done only at the full consent of the team. Should one or more of my team members decline, the session will not be recorded without penalty.

... I will be asked to fill out two short questionnaires exploring the factors that are associated with decision-making. These questionnaires should take me no more than 5 minutes. I may decline any individual items on the questionnaire that I prefer not to answer.

... I have been informed that the questionnaire, though remaining completely confidential, asks questions that I may find to be sensitive. I understand that I will be debriefed thoroughly about the goals of the study and will have the opportunity to ask questions of the researchers. There are no other known or anticipated risks to participants in this study.

... videotaped data and my questionnaire responses will be treated with complete confidentiality, and will not be revealed to anyone other than the DRDC Toronto research team and the Humansystems research team without my consent except as data unidentified as to source.

... I may withdraw my consent at any time without prejudice; my involvement as a participant will cease immediately and I will have the option of requesting that my data be destroyed.

... the Investigator(s), or their designate, may terminate my participation in the study only at any time, regardless of my wishes. However, this would not impact on my training.

... I will not receive any remuneration for my participation.

... data collection will occur *only if time permits and at the discretion of the training program instructor* and via unobtrusive video and audio recording

... the data may be reviewed by an accredited human research ethics audit committee for the purpose of review of research and data storage procedures as they relate to ethical guidelines for research involving human participants. I understand that any summary information resulting from such a review will not identify me personally.

... an experimental debriefing will be provided to me by on-site researchers. I will have an opportunity to talk about any study related issues if they arise.

*I have read the information sheet, and have had the opportunity to ask questions of the Investigators. Additional information or questions about the research project may be obtained by contacting Dr. Megan Thompson (416-635-2040).*

For Canadian Forces (CF) members only: I understand that I am considered to be on duty for disciplinary, administrative and Pension Act purposes during my participation in this experiment. This duty status has no effect on my right to withdraw from the experiment at any time I wish and I understand that no action will be taken against me for exercising this right.

I understand that I will receive a copy of the information sheet so that I may contact any of the above-mentioned individuals at some time in the future should that be required. I give my voluntarily consent to participate in the study "Decision-making in Operations: A Field Study" (L521) as explained to me by Humansystems Inc, and therefore agree to fill out the questionnaire.

Volunteer's Name (please print): \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

I also grant permission to have my training in one scenario videotaped and audio recorded and for my footage to be used for research only. I grant permission to the principal investigator to quote me directly from the scenario but without attribution or reference to my identity.

Volunteer's Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Witness to Signature (please print): \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



FOR SUBJECT ENQUIRY:

Should I have any questions or concern regarding this project before, during, or after participation, I am encouraged to contact Defence R&D Canada Toronto (DRDC Toronto), P.O. Box 2000, 1133 Sheppard Avenue West, Toronto, Ontario M3M 3B9. This contact can be made by surface mail at this address or in person, by phone or e-mail, to any of the DRDC Toronto numbers and addresses listed below:

- Principal DRDC Toronto Investigator: Dr. Megan Thompson, (416-635-2040) [megan.thompson@drdc-rddc.gc.ca](mailto:megan.thompson@drdc-rddc.gc.ca).
- Chair, DRDC Human Research Ethics Committee (HREC): Dr. Jack Landolt, 416-635-2120, [jack.landolt@drdc-rddc.gc.ca](mailto:jack.landolt@drdc-rddc.gc.ca).

I understand that I will be given a copy of the information sheet so that I may contact any of the above-mentioned individuals at some time in the future should that be required.

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# Annex B: Demographic Questionnaire

## DECISION-MAKING: FIELD STUDY MEFSIII

**PARTICIPANT NUMBER** (e.g. “Echo 1 Bravo” or “E1B”): \_\_\_\_\_

Please provide your background information in the spaces provided.

What is your current Rank?	What is your elemental command?
<input type="radio"/> 2Lt <input type="radio"/> LCol <input type="radio"/> Lt <input type="radio"/> Col <input type="radio"/> Capt <input type="radio"/> NCO <input type="radio"/> Maj <input type="radio"/> Other _____	<input type="radio"/> Army <input type="radio"/> Navy <input type="radio"/> Air Force <input type="radio"/> Other _____
What is your current trade in the armed forces? (Please indicate the name of your current trade, e.g. engineer, etc.)	Please indicate how many years you have served in the military in the space below.
What tours have you completed? For each tour, list location of tour, year, and your job during the tour.	What is your highest level of education?
	<input type="radio"/> Some high school <input type="radio"/> High school diploma <input type="radio"/> Some university or college <input type="radio"/> University or college degree <input type="radio"/> Graduate degree
What is your nationality?	What is your official first language?
Please indicate your age below.	Sex
	<input type="radio"/> Male <input type="radio"/> Female

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# Annex C: Information Sheet

## INFORMATION SHEET

**Research Title:** Decision Making in Operations: A Field Study Part III

Investigators: DRDC Toronto, HumanSystems Inc.

**THIS RESEARCH HAS BEEN REVIEWED BY AND RECEIVED ETHICS APPROVAL FROM THE DEFENCE RESEARCH AND DEVELOPMENT CANADA HUMAN RESEARCH ETHICS COMMITTEE (REVISED PROTOCOL L-521, AMENDMENT 2).**

<b>Purpose</b>	<p>Although fundamental to the success of a military operation, currently, there is only a small amount of research that addresses operational decision making in military observer missions. The results of this study will provide important information on how people make these decisions and provide valuable feedback to the CFB training program (IDENTIFYING INFORMATION REMOVED) in order to optimize training for these missions.</p>
<b>The Current Study</b>	<ol style="list-style-type: none"> <li>1. The current study will explore some of the factors that may influence decision making in operations during one of the CFB training program (IDENTIFYING INFORMATION REMOVED) dismantled training exercises.</li> <li>2. With your consent, we will videotape your team at the stand to accurately identify and code communications and behaviours likely to influence the successful resolution of the scenario. This videotaped data will be used for experimental purposes only, and will be viewed only by members of the research team.</li> <li>3. With your consent, we will also ask you to complete two short questionnaires; one regarding general demographic information and one regarding your decision making following the stand. The questionnaires should take no more than 5 minutes each.</li> </ol>
<b>Your Rights as a Participant</b>	<ol style="list-style-type: none"> <li>1. Your participation is <u>completely voluntary</u>.</li> <li>2. You may undertake your pre-deployment training without participating in this study, and you will not be videotaped or be asked to complete a questionnaire.</li> <li>3. You may also withdraw from this study at any time with no penalty to you or your teammates.</li> <li>4. Video recording of sessions is done only at the <u>full consent</u> of each team member. If one team member chooses not to be videotaped, we will not record the session.</li> <li>5. If you choose not to be videotaped, you may still participate by completing the questionnaires.</li> <li>6. All information you provide on the questionnaire is considered <u>completely confidential</u>, and you may decline to answer any items on the questionnaire if you so choose.</li> <li>7. Raw questionnaire and videotaped data will be accessed only by members of the research team. Your questionnaire responses will remain completely confidential and your faces will be blurred on the videotape to protect your identity.</li> <li>8. Results communicated or reported will NOT contain any identifying information.</li> </ol>

<b>Benefits</b>	Aggregate results will be provided to the CFB training program (IDENTIFYING INFORMATION REMOVED) to further enhance training and preparation for future military personnel.
<b>Risks</b>	The questionnaire, though remaining <u>completely confidential</u> , asks personally sensitive questions. Because operational decision making can be very difficult, some participants might feel discomfort answering some of the questions. The experimental debriefing that we will provide to you will also give us an opportunity to talk about these issues if they arise. We encourage you to provide us feedback about any of the questions, suggestions or concerns about the study.
<b>Contact Info</b>	<ul style="list-style-type: none"> <li>▪ <b>Principal DRDC Toronto Investigator:</b> Dr. Megan Thompson (416-635-2000 x.2040)</li> <li>▪ <b>Principal Humansystems Investigator:</b> Michael Thomson 519-836-5911 (x.301) <a href="mailto:mthomson@humansys.com">mthomson@humansys.com</a> and Dr. Barb Adams 519-836-5911 (x.249) <a href="mailto:badams@humansys.com">badams@humansys.com</a></li> <li>▪ <b>Chair, DRDC Human Research Ethics Committee (HREC):</b> Dr. Jack Landolt, (416-635-2120), <a href="mailto:jack.landolt@drdc-rddc.gc.ca">jack.landolt@drdc-rddc.gc.ca</a>.</li> </ul>

# Annex D: Participant Questionnaire

PARTICIPANT NUMBER (e.g. "Echo 1 Bravo" or "E1B"): \_\_\_\_\_

STAND NUMBER: \_\_\_\_\_

SESSION NUMBER: \_\_\_\_\_

<p><b>THE FOLLOWING STATEMENTS REFER TO YOUR EXPERIENCE IN THIS STAND. PLEASE CHECK THE CIRCLE THAT BEST DESCRIBES <u>YOUR</u> EXPERIENCE. ALL OF YOUR RESPONSES ARE <u>CONFIDENTIAL</u>.</b></p>	
1. The negotiation went better because of input from my team members.	<p>Strongly disagree      Neutral      Strongly agree</p> <p>○   ○   ○   ○   ○   ○   ○   ○   ○</p>
2. When the civilians were about to be escorted to the police station, how did your team decide what to do?	<p><b>a)</b> Team leader made decision without consulting team;</p> <p><b>b)</b> Team leader made decision after consulting team;</p> <p><b>c)</b> Team made decision as a unit;</p> <p><b>d)</b> Other (please describe in the space provided).</p>
3. How angry <u>were you</u> with the Sgt during the mission?	<p>Not at all                      Moderately                      Extremely</p> <p>○   ○   ○   ○   ○   ○   ○   ○   ○</p>
4. My team members provided assistance when it was required.	<p>Strongly disagree      Neutral      Strongly agree</p> <p>○   ○   ○   ○   ○   ○   ○   ○   ○</p>
5. How many times did your team have to discuss your options without the Sgt's interference?	<p>0   1   2   3   4   5   &gt;5</p> <p>○   ○   ○   ○   ○   ○   ○</p>
6. Did these opportunities help or hinder your team's performance?	<p>Hindered                      No effect                      Helped</p> <p>○   ○   ○   ○   ○   ○   ○   ○   ○</p>
7. How many ideas to help resolve the situation did your team generate?	<p>0   1   2   3   4   5   &gt; 5</p> <p>○   ○   ○   ○   ○   ○   ○</p>
8. Please briefly list these ideas in the space provided.	

**PARTICIPANT NUMBER** (e.g. “Echo 1 Bravo” or “E1B”): \_\_\_\_\_

**STAND NUMBER:** \_\_\_\_\_

**SESSION NUMBER:** \_\_\_\_\_

9. How much input did you <u>personally</u> have during these discussions?	None at all	Some	Right amount
	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
10. To what extent were the ideas that <u>you</u> gave your team actually used?	Not at all	Moderately	Completely
	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
11. If you had the chance to redo this scenario, how much would you change <u>your own</u> actions?	Not at all	Moderately	Completely
	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
12. If you thought that you would change your own actions, please indicate what you would have done differently in the space provided.			
13. I felt that my team valued my contribution to the negotiation.	Strongly disagree	Neutral	Strongly agree
	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
14. My team members had a common understanding of the situation.	Strongly disagree	Neutral	Strongly agree
	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
15. My team was able to adjust our strategy as the situation changed during the negotiation.	Strongly disagree	Neutral	Strongly agree
	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
16. My team shared critical information about the situation well.	Strongly disagree	Neutral	Strongly agree
	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
17. How angry <u>was the Sgt</u> during the mission?	Not at all	Moderately	Extremely
	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
18. How would you rate the overall quality of <u>the outcome</u> of this situation?	Worst possible	Neutral	Best possible
	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
19. How would you rate the overall quality of <u>your response</u> to this scenario?	Worst possible	Neutral	Best possible
	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>

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(U) As part of a Canadian Forces (CF) pre-deployment training course, military personnel participate in several realistic training exercises. One such exercise simulates a human rights violation. In this scenario, unarmed trainees encounter armed police (a sergeant and constable) verbally and physically abusing two civilians and forcing them to dig what could be their own graves. The civilians plead for their lives, continuously declaring their innocence and imminent death should the trainees leave. The trainees are kept at a distance (approximately 60 feet) from the two civilians by the lead police officer, the sergeant (Sgt). Trainee teams led by a designated team leader and consisting of 2 to 4 members must negotiate with him only. Team members observe the proceedings between the Sgt and the team leader, providing few opportunities to collaborate with their team. Trainees are challenged to use the negotiation skills they have learned to fulfil their mission mandate, and to advocate for the fair treatment of the civilians to promote a successful resolution for all parties.

The current study was initiated in response to the findings of two previous two studies (Thomson & Adams, 2007; Thomson, Adams, & Waldherr, 2008), in which team members have shown significantly more motivation to redo the scenario than team leaders. One possible explanation for this finding was that team members were not able to provide adequate input into the negotiation because the team leaders controlled the negotiation with the Sgt. Consequently, team members may not have been able to share ideas they generated over the course of the negotiation. To explore these issues, this experiment attempted to promote higher levels of teamwork during the negotiation by either prompting the trainee teams to “work as a team” (experimental condition) or not prompting them (baseline condition) immediately before providing the opportunity for an impromptu team huddle.

Although the experimental manipulation did not seem to promote higher levels of teamwork, allowing teams time to collaborate during the negotiation did have a number of impacts. During the negotiation (but excluding ‘team huddles’), several team behaviours including correcting team members’ errors and sharing and pursuing mission goals were particularly prominent. Within the team huddles, moreover, teams in both the experimental and baseline conditions took the opportunity to collaborate when it was provided. For example, all teams readily exchanged information, managed roles, and backed each other up, especially in multinational teams, whose leader was from a foreign country. Importantly, the majority of teams also used the huddle late in the negotiation to collaborate on the decision that the team needed to make (i.e., to leave, watch or follow the civilians) as the scenario drew to a close.

However, trainees’ perceptions of their own input during team huddle discussions and contribution to the negotiation suggested that team members were still less satisfied with their role than team leaders. They reported having had significantly less input during these discussions than did team leaders, and reported that their ideas were less valued and less used during the negotiation. In accordance with previous studies, they were marginally more motivated than leaders to redo the scenario if provided the opportunity. Some of the possible reasons behind this apparent disconnect are discussed. Implications for training and research are discussed.

(U) Préalablement à un déploiement, le personnel militaire des FC participe à plusieurs exercices d’entraînement réalistes. L’un d’entre eux comporte la simulation d’un cas de violation des droits des personnes : des stagiaires sans armes se retrouvent devant des

policiers armés (un sergent et un agent) qui maltraitent verbalement et physiquement deux civils en les faisant creuser ce qui pourrait devenir leurs tombes. Les civils supplient les policiers de leur laisser la vie sauve, affirmant leur innocence et, si les stagiaires les abandonnaient, leur mort imminente. Retenue à environ 20 mètres des deux civils par le sergent, policier principal, une équipe de stagiaires, constituée de deux à quatre personnes avec chef désigné, doit négocier seulement avec le sergent. Les membres de l'équipe observent le dialogue entre leur chef et le sergent et ont peu d'occasions de conseiller leur chef. Les stagiaires sont mis à rude épreuve de façon à utiliser les techniques de négociation apprises pour exécuter le mandat de leur mission et plaider en faveur d'un traitement juste pour les civils et favorable à une solution acceptable à toutes les parties.

La présente étude fait suite à deux précédentes (Thomson et Adams, 2007; Thomson, Adams et Waldherr, 2008) qui ont révélé que les membres des équipes de stagiaires sont considérablement plus enclins que les chefs d'équipes à refaire le scénario. Cette conclusion s'explique peut-être par le fait que les stagiaires n'ont pas eu l'occasion de participer convenablement aux négociations que poursuivaient leur chef et le sergent. Par conséquent, ils n'ont pas été en mesure d'exprimer les idées qui leur venaient pendant les négociations. La présente expérience, conçue pour examiner cette possibilité, visait à favoriser un travail d'équipe de niveaux plus élevés. Les stagiaires ont été soit invités à « travailler en équipe » (condition expérimentale), soit laissés à eux-mêmes (condition de base), immédiatement avant l'occasion de tenir un caucus improvisé.

Bien que la manipulation expérimentale n'ait pas semblé favoriser un travail d'équipe de niveaux plus élevés, le fait de concéder aux stagiaires le temps de se consulter pendant les négociations a eu des effets. Pendant les négociations (en dehors des « caucus »), plusieurs comportements propres au travail d'équipe ont été particulièrement fréquents, y compris la correction des erreurs commises par l'un ou l'autre des stagiaires, la responsabilité partagée et la poursuite des objectifs de mission. En outre, tant en condition expérimentale qu'en condition de base, les stagiaires profitaient des occasions de caucus pour se consulter. Par exemple, tous les membres de toutes les équipes ont spontanément échangé de l'information, géré les rôles et se sont soutenus mutuellement, particulièrement dans les équipes multinationales dont le chef provenait de l'étranger. Fait significatif, la majorité des équipes ont tenu des caucus alors que le processus de négociations était avancé et que la fin du scénario approchait, en vue de prendre collectivement une décision (abandonner, continuer de surveiller la situation ou accompagner les civils).

Pourtant, la perception que les stagiaires se sont fait de leur propre contribution aux discussions de caucus et aux négociations laisse croire que les membres des équipes sont toujours moins satisfaits de leur rôle que les chefs d'équipes le sont du leur. Les membres des équipes déclarent avoir contribué aux discussions considérablement moins que les chefs, et que leurs idées ont été moins valorisées et moins exploitées.

Conformément aux conclusions des études précédentes, ils seraient marginalement plus enclins que leur chef à refaire le scénario s'ils en avaient l'occasion. Quelques uns des motifs (possibles) de cette rupture, ainsi que ce que cela signifie pour l'entraînement et la recherche, font l'objet de discussions.

14. **KEYWORDS, DESCRIPTORS or IDENTIFIERS** (Technically meaningful terms or short phrases that characterize a document and could be helpful in cataloguing the document. They should be selected so that no security classification is required. Identifiers, such as equipment model designation, trade name, military project code name, geographic location may also be included. If possible keywords should be selected from a published thesaurus, e.g. Thesaurus of Engineering and Scientific Terms (TEST) and that thesaurus identified. If it is not possible to select indexing terms which are Unclassified, the classification of each should be indicated as with the title.)

(U) moral, ethics, Canadian Forces; decision making; training