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**Trust in Teams Scale  
Trust in Leaders Scale  
Manual for Administration and Analyses**

by:

Barbara D. Adams, Sonya Waldherr and Jessica Sartori

Humansystems® Incorporated  
111 Farquhar St.,  
Guelph, ON N1H 3N4

Project Manager:  
Barbara D. Adams, Ph.D.  
(519) 836 5911 ext 249

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Defence Research and Development Canada - Toronto  
1133 Sheppard Avenue West  
Toronto, Ontario, Canada  
M3M 3B9

DRDC Scientific Authority  
Dr. Megan Thompson  
(416) 635-2040

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Author

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Dr. Barbara D. Adams  
Humansystems Inc

Approved by

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Dr. Megan Thompson  
Scientific Authority – Collaborative Performance and Learning

Approved for release by

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K.C. Wulterkens  
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## Abstract

This report is a manual for the administration and the analyses of the *Trust in Teams* and *Trust in Leaders Scales* (Adams & Sartori, 2005). It begins with an overview of the trust construct and describes the conceptual framework underlying the scale. The Trust in Teams Scale and Trust in Leaders Scale can be used by researchers to study trust in small teams and trust in direct leaders of small teams. These scales are designed to primarily tap person-based trust that accrues as the direct result of personal experience and shared history. Although constructed within a military context, items are generic to small teams in general. The empirical studies that produced, refined and validated the measures are also briefly described. A response scale template is also provided. Instructions for administration and analyses of each of the scales are outlined. The 20 items comprising the *Trust in Teams* and the *Trust in Leaders Scales* are presented.



## Résumé

Ce rapport est un manuel servant à administrer et à analyser les échelles de *confiance envers les équipes* et de *confiance envers les chefs* (Adams et Sartori, 2005). Il commence par donner un aperçu du concept de la confiance et décrit le cadre conceptuel qui sous-tend chaque échelle. L'échelle de la confiance envers les équipes et l'échelle de la confiance envers les chefs permettent aux chercheurs d'étudier la confiance au sein de petites équipes et la confiance à l'égard des chefs immédiats de petites équipes. Ces échelles sont conçues pour extraire principalement la confiance fondée sur les personnes qui découle directement de l'expérience personnelle et des antécédents communs. Même si le contexte est militaire, les points examinés s'appliquent aux petites équipes en général. Les études empiriques qui ont servi à élaborer, à peaufiner et à valider les mesures sont également décrites brièvement. On fournit aussi un modèle d'échelle des réponses, ainsi que des instructions relatives à l'administration et à l'analyse des deux échelles. Les 20 éléments qui constituent les échelles de la *confiance envers les équipes* et de la *confiance envers les chefs* sont présentés.

## Executive Summary

This report is a manual for the administration and analyses of the Trust in Teams and Trust in Leaders Scales (Adams & Sartori, 2005). The Trust in Teams and Trust in Leaders scales were developed to investigate trust in Canadian Forces (CF) military teams and leaders. Questionnaires to examine trust in teams and leaders in the CF were developed because previous measures of trust in teams have shown variable internal reliability and construct validity. Moreover, most questionnaires did not speak to the military context, and when they did, they suffered the same shortcomings as the other trust measures. The Trust in Teams Scale and Trust in Leaders Scale were developed so that they can be used by researchers to study trust in small teams and trust in direct leaders of small teams. These scales are designed to primarily tap person-based trust that accrues as the direct result of personal experience and shared history. Although constructed within a military context, items are generic to small teams in general.

The Trust in Teams and Trust in Leaders scales were designed to capture four major dimensions of trust:

1. Competence - the extent to which the person exhibits a group of skills, competencies and characteristics that allow them to have influence in some domain.
2. Integrity – the extent to which the person is seen as honourable and their words match their actions
3. Benevolence – the extent to which the person is seen to be genuinely caring and concerned
4. Predictability – the extent to which the person’s behaviour is consistent

Three studies are described that refined and established the reliability and validity of the two scales. Instructions for the administration and the analyses of the two scales are also provided. The scales, including the factor structure assignment, reverse-scoring, and reliability coefficients for each of the items are also presented.



## Sommaire

Ce rapport est un manuel servant à administrer et à analyser les échelles de confiance envers les équipes et de confiance envers les chefs (Adams et Sartori, 2005). Ces échelles de confiance ont été élaborées pour examiner la confiance envers les équipes et les chefs militaires des Forces canadiennes (FC). On a élaboré des questionnaires afin d'examiner la confiance envers les équipes et envers les chefs dans les FC parce que les mesures antérieures de la confiance à l'égard des équipes témoignent d'une fiabilité interne et d'une validité conceptuelle inégales. En outre, la plupart des questionnaires n'avaient aucun lien avec le contexte militaire, et quand ils en avaient un, ils présentaient les mêmes lacunes que les autres outils de mesure de la confiance. L'échelle de la confiance envers les équipes et l'échelle de la confiance envers les chefs ont été élaborées afin que les chercheurs puissent étudier la confiance au sein de petites équipes et la confiance à l'égard des chefs immédiats de petites équipes. Ces échelles sont conçues pour extraire principalement la confiance fondée sur les personnes qui découle directement de l'expérience personnelle et des antécédents communs. Même si le contexte est militaire, les points examinés s'appliquent aux petites équipes en général.

Les échelles de la confiance envers les équipes et de la confiance envers les chefs ont été conçues pour saisir des données sur quatre grandes dimensions de la confiance :

5. Compétence – dans quelle mesure le sujet manifeste un ensemble d'habiletés, de compétences et de caractéristiques lui permettant d'exercer une influence dans un domaine.
6. Intégrité – dans quelle mesure on perçoit que le sujet agit de manière honorable et honnête.
7. Volonté de bien faire – dans quelle mesure on perçoit que le sujet montre un souci et une sollicitude véritables.
8. Prévisibilité – dans quelle mesure le comportement du sujet est stable.

On décrit trois études qui ont permis de préciser et de confirmer la fiabilité et la validité des deux échelles. On fournit des instructions relatives à l'administration et à l'analyse des deux échelles. On présente aussi les échelles, y compris la structure des facteurs attribuée, la notation inversée et les coefficients de fiabilité pour chacun des éléments.

# Introduction

Trust is typically characterized as “*the willingness of a party to be vulnerable to the outcomes of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party*” (Mayer, Davis, & Schoorman, 1995, p. 712). Military scholars have long recognized the importance of building a command climate of trust (e.g., Cox, 1996; McCann & Pigeau, 1996). Trust satisfies the need to predict and understand others (Adams, Bryant, & Webb, 2001) and is critical in situations requiring interdependence with others, and those involving perceived risk, vulnerability, and uncertainty (Costa, Roe, & Tailleau, 2001; Rousseau, Sitkin, Burt, & Camerer, 1998).

## Background of the Trust in Teams Scale and Trust in Leaders Scale

The Trust in Teams and Trust in Leaders questionnaires were developed to investigate trust in Canadian Forces (CF) military teams and leaders. A critical distinction in the trust literature is that of person-based and category-based trust. Person-based trust is the most common form of trust, and typically requires prolonged interactions with others, as well as direct and personal contact. In short, person-based trust involves attributions about the skills, integrity and genuine concern of other people. Category-based trust develops in the absence of direct and personal contact, and without shared social norms and experiences or proof of one’s skills and abilities (Kramer, 1999). It refers to trust conferred automatically upon a person of a particular rank, reputation, role, or with membership in a group.

Questionnaires to examine trust in teams and leaders in the CF were developed because previous measures of trust in teams (e.g., Cook & Wall, 1980; Costa, Roe, & Thailieu, 2001; Cummings & Bromiley, 1996; Dirks, 1999; Simons & Peterson, 2000) and trust in leaders (Dirks, 2000; Korsgaard et al., 2002; McAllister, 1995; Podsakoff, Mackenzie, Moorman, & Fetter, 1990) have shown variable internal reliability and construct validity. Moreover, most questionnaires did not speak to the military context, and when they did, they suffered the same shortcomings as the other trust measures (e.g., Murphy & Farley, 2000; Shamir, Brainin, Zakay, & Popper, 2000).

Our review of existing trust measures demonstrated positive and negative approaches to questionnaire construction. On the positive side, existing measures indicate common underlying assumptions and theoretical agreement about the core components of trust. Specifically, there appeared to be much agreement that integrity, predictability, competence, and benevolence are the four major components of trust (see Adams & Webb, 2003, for a complete review). On the negative side, existing measures have been poorly validated in general, with authors demonstrating over-reliance on internal consistency to the neglect of construct, convergent, and discriminant validity. Thus, one of the goals in the construction of the Trust in Teams and Trust in Leaders questionnaires was to uphold positive principles and resolve negative procedures demonstrated in previous team and leader trust questionnaires. To this end, pragmatic requirements and conceptual decisions were made *a priori*. The pragmatic considerations are listed in Table 1.

**Table 1: Pragmatic considerations for the Trust in Teams and Trust in Leaders Scales**

| Pragmatic Consideration                              | Description  |
|--|--|
| Control for literacy.                                | Because there are varying levels of education in the CF, the questionnaires must satisfy literacy at the lower levels.   |
| Maintain generalizability.                           | We were not only interested in creating a questionnaire for use in the military, we also wanted to develop a general questionnaire that could be used in the context of any team.            |
| Uphold proper questionnaire construction techniques. | An approximately equal numbers of items were developed for each subscale. Items contained cognitive, affective, and behavioural components of trust. Each item expressed only a single idea. |

The conceptual considerations are listed in table 2 below.

**Table 2: Conceptual considerations for the Trust in Teams and Trust in Leaders questionnaires**

| Conceptual Considerations  | Description   |
|--|---|
| Trust must be measured indirectly using the four factors (integrity, predictability, competence, benevolence). | Because trust might be identified as a socially desirable team phenomenon, it was measured indirectly to ensure that the answers described the true levels of trust within a team, not those the participants perceive as desirable.<br><br>It seemed prudent to avoid the use of the word trust because we have noted a strong reluctance on the part of some military personnel to think in terms of “touchy-feely” trust (Adams & Webb, 2003). |
| Trust must be measured at the team level as opposed to the individual level.                                   | Because we are measuring trust in teams, valid questionnaires must conceptualize trust at the team level.<br><br>Ethically, the questionnaire items must not implicate certain individuals as this could alter the team dynamics.   |
| Contextualized items.  | Because trust is defined as occurring in situations involving risk, uncertainty, and vulnerability, these situational antecedents should be represented in the scale items.   |

### **Framework of the Trust in Teams and Trust in Leaders Scale**

The Trust in Teams Scale and Trust in Leaders Scale were written to capture four dimensions of the latent variable trust. The dimensions are as follows:

1. Competence - the extent to which the person exhibits a group of skills, competencies and characteristics that allow them to have influence in some domain.
2. Integrity – the extent to which the person is seen as honourable and their words match their actions
3. Benevolence – the extent to which the person is seen to be genuinely caring and concerned
4. Predictability – the extent to which the person’s behaviour is consistent

## Previous Work and Necessary Revisions

A preliminary validation of the Trust in Teams and Trust in Leaders scales was conducted. This section provides a brief description of these past efforts. Adams, Bruyn and Chung-Yan (2004) provide a more detailed explanation of the development of the questionnaire as well as a description of the theoretical structure upon which they were based.

The Trust in Teams and Trust in Leaders questionnaires as they currently exist are the result of three studies with CF members. Initial analyses revealed that the scale would be improved with the deletion of several items. Once this was done, exploratory factor analysis was performed. This analysis showed that the Competence subscale items were problematic and failed to load onto a single factor. However, analyses with the Competence items removed showed that Benevolence, Integrity and Predictability did form 3 distinct factors. As such, the Competence items were revised before proceeding with future validation efforts.

The revised Trust in Teams scale and Trust in Leaders scales were again analyzed in terms of descriptive statistics and reliability estimates. Analyses for each scale using the full set of items for each showed very high reliabilities for both the scales as a whole and the subscales, and very high item-total correlations. In fact, these values were so high that to analyze the entire set of items would have been redundant. This enabled the creation of a shorter set of items for each subscale, with little or no impact on the psychometric properties of the scales. This also makes the Team Trust Scale and Leaders Trust Scale shorter and easier to complete with less redundancy for future participants. As all items had been designed to reflect the underlying constructs at a theoretical level, and as the underlying theory had not changed, there was no theoretical basis on which to decide which items to delete. Ultimately, the decision about which redundant items to delete was made empirically, by progressively removing a single item within each subscale with the lowest item-total correlation and then recalculating the new reliability and item-total correlations. This operation continued until 5 items for each subscale remained.



## Demographics

Two hundred and twenty five regular force Army personnel currently serving with a Canadian Forces battalion participated in this study. Participants completed a questionnaire containing demographic information and that probed various team characteristics as well as military experience.

The vast majority of participants (98%) reported themselves to be current members of a team. All analyses from this point, then, are based on data from 220 participants. Thirty-seven percent (37%) of participants were under the age of 26, 45% were between 27 and 36, and 18% were between 37 and 46. No participants were older than 47. The vast majority (95%) were men, and had English (96%) as their first language. In terms of education level, 72% of participants reported having a high school diploma and some university or college.

The majority of participants (76%) belonged to combat arms, with 24% in support or administrative roles. Approximately one-third (34%) of participants reported having no operational experience of any kind, but the majority (66%) reported having had at least one tour.

Most participants were in small teams, with 80% of them belonging to teams with 10 or fewer people. The majority of respondents (82%) defined themselves as working with other members of their team 5 days a week. This suggests a high level of contact and interaction with the other members of their teams.

Team turnover was reported to be quite high, with only 9% of participants reporting no personnel changes within their teams in the previous year. Moreover, 29% of participants reported more than 7 personnel changes within their teams during the previous year.

Participants indicated that they knew about 60% of the people in their team well within a work context, and 36% well at a personal level. There was a somewhat higher level of familiarity in very small teams (those with 2 to 4 people). This suggests that despite the turnover, team members were able to gain knowledge about and to form relationships with other team members very quickly.

Only 15% of participants reported having had no prior experience working in their teams for field exercises. The majority of participants (69%) reported having completed between 1 and 4 field exercises with their team, with 16% having participated in 5 or more field exercises. However, the majority of participants (89%) reported having had no operational experience with their current teams. This is, of course, unsurprising given the very high rates of turnover within CF teams.

# Reliability

Reliability refers to the consistency or stability of measures or observations. Essentially, if a person is measured twice on the same measure it should yield the same score both times. In contrast to definitions based on reliability as temporal stability, reliability can also mean internal consistency or covariances among components of a linear combination (Nunnally & Bernstein, 1994). Internal consistency describes estimates of reliability based on the average correlation among items within a test (Nunnally & Bernstein, 1994). Cronbach’s alpha is the most commonly used indicator of internal consistency, however, inter-item correlations can also provide good estimates of internal consistency. It is important not to confuse the two types of definitions, as a measure can have high or low internal consistency independent of high or low temporal stability (Nunnally & Bernstein, 1994).

## Internal Consistency for the Trust in Teams and Trust in Leaders Scales

Table 3 presents the Cronbach’s alpha internal consistency coefficients for the Trust in Teams and Trust in Leaders scales. As shown in the table, internal consistency for the Trust in Teams scale is very good with alphas ranging from .87 for Predictability to .92 for Benevolence. Although the Competence subscale did not perform well in the first iteration, the revised items appear to capture Competence reliably. The reliability of the Trust in Team Scale overall is very high at .97. However, the mean inter-item correlation of .59 may be higher than is optimal.

The reliability of the Trust in Leaders scale overall was also very good. All subscales performed very well, with alphas ranging from .89 for Predictability to .95 for Competence. The reliability of the Trust in Leaders scale overall was very high at .97 with a mean inter-item correlation of .62. Again, this level of internal consistency within the scale is perhaps higher than desirable.

**Table 3. Internal Consistency for the Trust in Teams and Trust in Leaders scales**

| Subscale       | Valid N | Team Trust Scale |                        | Leader Trust Scale |                        |
|----------------|---------|------------------|------------------------|--------------------|------------------------|
|                |         | Cronbach’s alpha | Inter-item Correlation | Cronbach’s alpha   | Inter-item Correlation |
| Competence     | 220     | .91              | .68                    | .95                | .80                    |
| Integrity      | 220     | .91              | .66                    | .89                | .67                    |
| Benevolence    | 220     | .92              | .69                    | .94                | .76                    |
| Predictability | 220     | .87              | .58                    | .90                | .64                    |
| Overall        | 220     | .97              | .59                    | .97                | .62                    |



# Validity

The validity of a psychological test generally refers to the degree to which the measure actually measures what it purports to measure (Nunnally & Bernstein, 1994). Validity has been given three major meanings: construct validity, predictive validity (criterion-related validity), and content validity. Construct validity refers to how well the questionnaire measures the construct of interest. This can take the form of convergent or discriminant validity whereby the test correlates with other tests that it should be conceptually related to and correlated less with measures that it should not be associated. Predictive validity concerns using the test to estimate some criterion behaviour that is external to the questionnaire (e.g., combat readiness). Finally content validity addresses whether the measure adequately samples the relevant material it purports to cover.

## Construct Validity

The current questionnaires have convergent validity with similar constructs.

A scale used by Zolin and Hinds (2004) was an important scale to compare to our own team trust scale because it was specifically designed to measure trust within workplace teams, although within a different context. Zolin and Hinds (2004) measured perceived trustworthiness in co-located versus geographically distributed engineering student teams comprising 12 workgroups of three or four members. As both the Trust in Teams and the Zolin and Hinds scales aim to measure team trust, we expected a strong correlation between the two. In addition, we also expected that the correlations between the subscales tapping the same dimension would be more strongly correlated than would constructs tapping dissimilar dimensions. Overall, it was found that relationships between our subscales and those of Zolin and Hinds were positive and highly significant. Specifically, our Team Trust Index correlated quite strongly with the Zolin and Hinds team trust index. Importantly, it was not wholly overlapping. However, other than for the Competence subscale matched constructs were not uniquely correlated. Both our Benevolence subscale and our Integrity subscale were more closely related to the Zolin and Hinds Ability subscale than to the related dimension subscales.

Similar analyses were also conducted with van der Kloet's Team Trust Scale (2005). The van der Kloet scale was created to measure team trust within the military on 4 dimensions (honesty/integrity, predictability, benevolence, and competence). There was a significant relationship between the Trust in Teams scale and the van der Kloet scale, suggesting that, as a whole, these scales capture the same general construct without being redundant. Again, one would expect that subscales aiming to tap the same dimension would be more highly related than would subscales tapping different dimensions. However, only the Integrity subscales showed this pattern.

The relationship between the Trust in Leaders Scale and three scales measuring leader trust were also explored. The first scale was Shamir, Brainin, Zakay, and Popper's (2000) Confidence in the Leader Scale. This is a 4-item scale designed to measure confidence in a military leader. The questionnaire is rated on a five-point from 1 ("Never") to 5 ("Always") and all items are summed into a single index of leader trust. The second scale was created by McAllister (1995) to measure manager's trust in their peers. This 9-item scale was adapted to the military context for the purpose of comparison. This scale uses a 7-point rating system ranging from 1 (strongly disagree) to 7 (strongly agree). Finally, the Trust in Leaders scale was compared to van der Kloet's (2005) trust in leader measures, which were designed to be used in a military context. This 7-item scale was originally created to measure trust in the platoon commander. However, for our purposes, the

referent of the scale was changed from “platoon commander” to “team leader”. This scale uses the 3-point rating system of 0 (“Don’t know”), 1 (“Not true”), and 2 (“True”).

We expected strong and significant (but not wholly overlapping) relationships between our Trust in Leaders scale and the other available measures of leader trust. In short, our scales were significantly and positively correlated with all of the leader trust scales, but particularly strongly with the Shamir et al. (2000) and McAllister (1995) leader trust scales. The correlations for Competence, Benevolence and Integrity were larger than the correlations with the Predictability subscale. As a whole, these findings suggest that the Trust in Leaders Scale parallels existing scales that measure leader trust very well.

## Criterion-Related Validity

Trust research within organizational contexts and in academic laboratories has attended to both the direct and indirect ways that team trust can influence behaviour. Good measures of team trust should be able to predict the ability of teams to create positive team milieu and morale, as well as to work together effectively. To explore the predictive ability of the Trust in Teams Scale, several relevant items from another measure, the Human Dimensions of Operations (Murphy & Farley, 2000), were also analyzed in parallel with the Trust in Teams Scale. If the Trust in Teams Scale has predictive validity, it should be able to anticipate positive team outcomes.

The Trust in Teams Scale was a significant predictor of perceived teamwork. More specifically, participants who had high levels of trust in their teammates also reported positive teamwork within their teams; namely, that their team members actively work to encourage each other. This effect was driven by the predictive power of the Integrity and Competence subscales. Benevolence and Predictability were not significant influences.

The relationship between the Trust in Teams Scale and morale at both the personal and platoon level was also explored. As team trust is likely to be closely related to team morale, high scores on the Trust in Teams Scale should be able to predict levels of morale within teams. Again, the Trust in Teams Scale was a significant predictor of team members’ personal level of morale, as well as a predictor of morale within one’s platoon or troop. Again, only the Integrity and Competence subscales seemed to drive these effects.

As team trust and cohesion are argued to be related in the military literature (e.g., Scull, 1990), the Trust in Teams Scale was expected to positively predict team cohesion. Results showed that the Trust in Teams Scale was a significant predictor of perceived cohesion, and this effect was driven solely by the Competence dimension. Again, individuals who rate their teams as highly trustworthy also reported that their troops were high in cohesion. Indeed, as a whole, it is somewhat surprising that Benevolence did not play more of a role in predicting positive team processes.

It was also important to explore how well the Trust in Teams Scale would predict combat readiness. In theory, high trust within teams should promote team members’ overall sense of optimism about the tasks that the team needs to accomplish. In military teams, such as the ones within this sample, a critical future task is going into combat. As such, other analyses explored the relationship between perceived combat readiness and the measure of team trust. Trust in another team member’s abilities is likely to be the most influential predictor of combat readiness.

Importantly, the Trust in Teams Scale did significantly predict combat readiness. Again, the Competence subscale was the driving force, suggesting that trusting one’s teammates to be competent is an important predictor of to be combat ready.



## Confirmatory Factor Analysis

Confirmatory factor analysis enables researchers to assess the fit of their proposed theoretical models compared to other potential models that might also fit the data.

The Trust in Teams Scale was designed to capture four dimensions, with each dimension being represented by several items. Even though previous exploratory factor analyses (Adams, Bruyn, & Chung-Yan, 2004) had shown that Benevolence, Integrity and Predictability load onto the expected factors, Competence items did not form a discrete factor, making it impossible to test the structure of the full scale. Therefore, it was important to retest the structure of the Trust in Teams Scale with a larger sample and refined Competence items. Although we had a clear theoretical model of the structure of our Trust in Teams Scale, it was important to test other models that might also provide a good fit to the data. It would be reasonable to argue that the fine distinctions amongst different dimensions of trust might not be necessary, and to propose a model that simply depicts all dimensions of trust related to a simple undifferentiated trust construct. Such a model would have all scale items loading on a single dimension.

Confirmatory factor analyses showed that the hypothesized structure underlying the scales to be superior to the competing model. That is, the correlated 4 factor model showed a significantly better fit to the data than the single factor model. This finding suggests that the underlying structure of the Trust in Teams Scale is as hypothesized, providing yet another indication of its construct validity.

Confirmatory factor analyses were also conducted to explore whether the Trust in Leaders Scale captures the dimensions underlying leader trust. As with the Trust in Teams Scale, these analyses tested two different models; our hypothesized 4-factor correlated model and a full model depicting leader trust as unidimensional construct underlying trust in leaders.

Although providing some fit to the data, the single factor model was clearly inferior to the 4 factor model depicting competence, benevolence, integrity and predictability as the most influential factors in leader trust. The results of this confirmatory factor analysis verify the structure of the Trust in Leaders Scale, and its theoretical underpinnings.

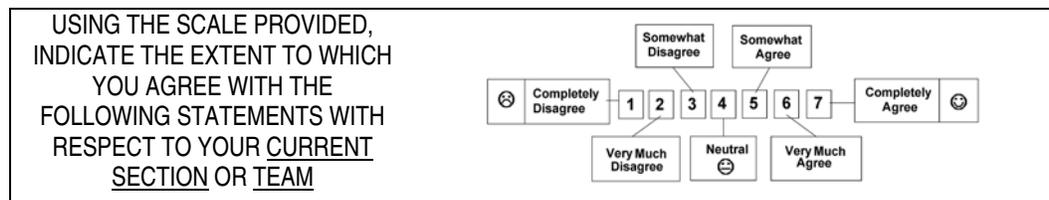
# Administration and Analyses

The Trust in Teams Scale and Trust in Leaders Scale can be used by researchers to study trust in small teams and trust in direct leaders of small teams. These scales are designed to primarily tap person-based trust that accrues as the direct result of personal experience and shared history. Although constructed within a military context, items are generic to small teams in general.

The scales in their current state, including factor structure, reverse-scoring, and reliability coefficients appear in Annexes A (Team Trust) and B (Leader Trust). Items are shown pertaining to their representative factor.

During administration, the items are randomly ordered within the questionnaire. Individual participants are asked to rate their agreement with the items using a 7-point scale ranging from 1 (“Completely Disagree”) to 7 (“Completely Agree”) with a neutral midpoint (see figure 1). In the instructions, the referent varies as ‘current section or team’ and ‘current team leader’ depending on the desired referent.

**Figure 1: Trust in Teams questionnaire rating scale**



Once data has been collected, ratings can be summed and averaged into a single index of trust. Means can be calculated based on all items in the scale, as well as separately for each dimension. This allows researchers to not only determine the participants’ overall trust in their team and/or leader, but also specify which areas of trust are contributing most to the overall trust perceptions.



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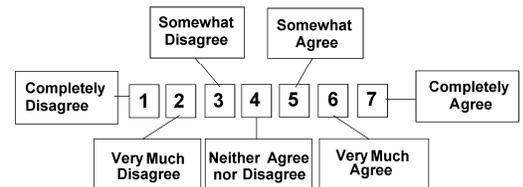
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## Annex A: Trust in Teams Scale (Adams & Sartori, 2005)

Using the scale provided, indicate the extent to which you agree with the following statements with respect to your current team. There are no right or wrong answers. We are interested in your honest opinions.



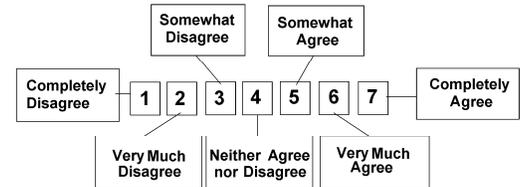
|  | Completely Disagree   |                       |                       | Completely Agree      |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>SAMPLE ITEMS</b>  | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     |
| 1. My teammates honour their word.                             | <input type="radio"/> |
| 2. I believe that my teammates have my best interests in mind. | <input type="radio"/> |

**Table 4: Descriptive statistics and reliabilities – Trust in Teams Scale**

|   | Valid N    | Mean        | Std.Dev.    | Skewness     | Kurtosis    | Item-Total r | Alpha if deleted |
|---|------------|-------------|-------------|--------------|-------------|--------------|------------------|
| <b>Team Benevolence (mean = 4.96; mean inter-item correlation = .69; alpha = .92)</b>     |            |             |             |              |             |              |                  |
| I believe that my teammates have my best interests in mind.                               | 220        | 4.78        | 1.28        | -.47         | .41         | 0.75         | 0.90             |
| My team is motivated to protect me.   | 220        | 4.93        | 1.30        | -.36         | -.22        | 0.83         | 0.89             |
| I feel that my teammates work to protect me.  | 220        | 4.79        | 1.35        | -.45         | .28         | 0.78         | 0.90             |
| My teammates watch my back.   | 220        | 5.21        | 1.19        | -.42         | -.09        | 0.79         | 0.90             |
| My teammates look out for me.   | 220        | 5.11        | 1.25        | -.48         | .14         | 0.77         | 0.90             |
| <b>Team Integrity (mean = 5.16; mean inter-item correlation = .66; alpha = .91)</b>       |            |             |             |              |             |              |                  |
| I can depend on my teammates to be fair.  | 220        | 5.25        | 1.14        | -.79         | .85         | 0.75         | 0.89             |
| My teammates are honourable people.   | 220        | 5.25        | 1.11        | -.33         | .28         | 0.76         | 0.89             |
| My teammates honour their word.   | 220        | 5.07        | 1.21        | -.52         | .29         | 0.72         | 0.89             |
| My teammates keep their promises.   | 220        | 5.16        | 1.15        | -.43         | .06         | 0.83         | 0.87             |
| My teammates tell the truth.  | 220        | 5.07        | 1.26        | -.72         | .73         | 0.76         | 0.88             |
| <b>Team Predictability (mean = 5.21; mean inter-item correlation = .58 ; alpha = .87)</b> |            |             |             |              |             |              |                  |
| I know what to expect from my team.   | 220        | 5.34        | 1.12        | -.88         | 1.44        | 0.75         | 0.83             |
| I usually know how my teammates are going to react.                                       | 220        | 5.00        | 1.07        | -.15         | -.44        | 0.63         | 0.86             |
| In times of uncertainty, my team sticks to the plan.                                      | 220        | 5.24        | 1.09        | -.39         | .07         | 0.69         | 0.85             |
| My teammates are reliable.  | 220        | 5.29        | 1.18        | -.87         | 1.10        | 0.71         | 0.84             |
| My teammates behave consistently.   | 220        | 5.18        | 1.15        | -.65         | .56         | 0.70         | 0.84             |
| <b>Team Competence (mean = 5.40; mean inter-item correlation = .68; alpha = .91)</b>      |            |             |             |              |             |              |                  |
| My teammates are capable at their jobs.   | 220        | 5.49        | 1.10        | -.86         | 1.17        | 0.84         | 0.88             |
| My teammates know what they are doing.  | 220        | 5.42        | 1.13        | -.70         | .47         | 0.80         | 0.89             |
| I have faith in the abilities of my teammates.  | 220        | 5.37        | 1.17        | -.80         | .70         | 0.81         | 0.89             |
| My teammates are qualified to do their job.   | 220        | 5.51        | 1.22        | -.87         | .78         | 0.77         | 0.90             |
| My team members communicate well.   | 220        | 5.22        | 1.07        | -.68         | .83         | 0.68         | 0.91             |
| <b>Team Trust (Overall Index)</b>   | <b>220</b> | <b>5.18</b> | <b>1.18</b> | <b>-0.59</b> | <b>0.47</b> | <b>-</b>     | <b>-</b>         |

## Annex B: Trust in Leaders Scale (Adams & Sartori, 2005)

Using the scale provided, indicate the extent to which you agree with the following statements with respect to your current team leader. There are no right or wrong answers. We are interested in your honest opinions.



| SAMPLE ITEMS  | Completely Disagree   |                       |                       | Completely Agree      |                       |                       |                       |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|   | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     |
| 1. I know my leader will keep his word.               | <input type="radio"/> |
| 2. I have confidence in the motivations of my leader. | <input type="radio"/> |

**Table 5: Descriptive statistics and reliabilities – Trust in Leaders Scale**

|   | Valid N    | Mean        | Std.Dev.    | Skewness     | Kurtosis    | Item-Total r | Alpha if deleted |
|---|------------|-------------|-------------|--------------|-------------|--------------|------------------|
| <b>Benevolence (mean = 5.12; mean inter-item correlation = .76; alpha = .94)</b>    |            |             |             |              |             |              |                  |
| I have confidence in the motivations of my leader.                                  | 140        | 5.13        | 1.46        | -0.71        | 0.19        | 0.81         | 0.93             |
| My leader watches my back.  | 140        | 5.11        | 1.48        | -0.79        | 0.48        | 0.83         | 0.93             |
| My team leader has my best interests in mind.                                       | 140        | 5.09        | 1.48        | -0.81        | 0.24        | 0.85         | 0.92             |
| My leader is genuinely concerned about my well being.                               | 140        | 5.01        | 1.43        | -0.80        | 0.67        | 0.84         | 0.93             |
| My team leader is likely to protect me.   | 140        | 5.24        | 1.45        | -0.84        | 0.41        | 0.85         | 0.92             |
| <b>Integrity (mean = 5.38; mean inter-item correlation = .67; alpha =.89)</b>       |            |             |             |              |             |              |                  |
| I believe my leader is fair.  | 140        | 5.49        | 1.44        | -1.21        | 1.44        | 0.82         | 0.85             |
| I believe my leader is honest.  | 140        | 5.48        | 1.32        | -0.85        | 0.53        | 0.83         | 0.85             |
| I can depend on the fairness of my leader.  | 140        | 5.26        | 1.51        | -0.97        | 0.68        | 0.84         | 0.84             |
| My leader puts their words into action.   | 140        | 5.41        | 1.51        | -0.78        | -0.24       | 0.44         | 0.93             |
| I know my leader will keep their word.  | 140        | 5.25        | 1.56        | -0.99        | 0.77        | 0.78         | 0.86             |
| <b>Predictability (mean = 4.97; mean inter-item correlation = .64; alpha = .90)</b> |            |             |             |              |             |              |                  |
| I usually know how my leader is going to react.                                     | 140        | 4.87        | 1.17        | -0.50        | 0.24        | 0.81         | 0.86             |
| I can anticipate what my leader will do.  | 140        | 4.85        | 1.22        | -0.60        | 0.90        | 0.77         | 0.86             |
| I know exactly what my leader will do in difficult situations.                      | 140        | 4.61        | 1.14        | -0.29        | 0.47        | 0.77         | 0.87             |
| I can rely on my leader to behave predictably.                                      | 140        | 5.11        | 1.34        | -0.66        | 0.29        | 0.66         | 0.89             |
| My leader behaves in a very consistent manner.                                      | 140        | 5.29        | 1.19        | -0.77        | 0.67        | 0.71         | 0.88             |
| <b>Competence (mean = 5.52; mean inter-item correlation = .80; alpha = .95)</b>     |            |             |             |              |             |              |                  |
| My team leader performs their job well.   | 140        | 5.64        | 1.21        | -0.98        | 1.14        | 0.81         | 0.86             |
| I have confidence in the abilities of my team leader.                               | 140        | 5.35        | 1.44        | -1.11        | 0.98        | 0.77         | 0.86             |
| My team leader is capable at their job.   | 140        | 5.67        | 1.18        | -0.97        | 1.09        | 0.77         | 0.87             |
| My team leader is highly skilled.   | 140        | 5.44        | 1.33        | -0.97        | 1.19        | 0.66         | 0.89             |
| My team leader knows what they are doing.   | 140        | 5.48        | 1.28        | -0.96        | 0.69        | 0.71         | 0.88             |
| <b>Leader Trust (Overall Index)</b>   | <b>140</b> | <b>5.24</b> | <b>1.36</b> | <b>-0.83</b> | <b>0.64</b> |              |                  |



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(U) This report is a manual for the administration and the analyses of the Trust in Teams and Trust in Leaders Scales (Adams & Sartori, 2005). It begins with an overview of the trust construct and describes the conceptual framework underlying the scale. The Trust in Teams Scale and Trust in Leaders Scale can be used by researchers to study trust in small teams and trust in direct leaders of small teams. These scales are designed to primarily tap person-based trust that accrues as the direct result of personal experience and shared history. Although constructed within a military context, items are generic to small teams in general. The empirical studies that produced, refined and validated the measures are also briefly described. A response scale template is also provided. Instructions for administration and analyses of each of the scales are outlined. The 20 items comprising the Trust in Teams and the Trust in Leaders Scales are presented.

(U) Ce rapport est un manuel servant à administrer et à analyser les échelles de confiance envers les équipes et de confiance envers les chefs (Adams et Sartori, 2005). Il commence par donner un aperçu du concept de la confiance et décrit le cadre conceptuel qui sous-tend chaque échelle. L'échelle de la confiance envers les équipes et l'échelle de la confiance envers les chefs permettent aux chercheurs d'étudier la confiance au sein de petites équipes et la confiance à l'égard des chefs immédiats de petites équipes. Ces échelles sont conçues pour extraire principalement la confiance fondée sur les personnes qui découle directement de l'expérience personnelle et des antécédents communs. Même si le contexte est militaire, les points examinés s'appliquent aux petites équipes en général. Les études empiriques qui ont servi à élaborer, à peaufiner et à valider les mesures sont également décrites brièvement. On fournit aussi un modèle d'échelle des réponses, ainsi que des instructions relatives à l'administration et à l'analyse des deux échelles. Les 20 éléments qui constituent les échelles de la confiance envers les équipes et de la confiance envers les chefs sont présentés.

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