FFI RAPPORT

PART II: ALLIED WARRIOR 2004 - Pilot study and analysis of cross-cultural organizational issues

BJØRNSTAD Anne Lise

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8) ABSTRACT

FFI-project 879 Network Based Defense in Operations aims to increase the understanding of the transformation of the Norwegian Armed Forces toward NBD, including both theoretical and empirical examinations of the concept, linked to both the technological and the organizational development.

This report presents the analysis of the cross-cultural issues linked to the organization and cooperation in a NATO Headquarter (HQ), based on the data collected at the NATO exercise Allied Warrior 2004 (AW04). (Part I of this report focused on the organizational processes, as well as reporting on the methodological issues involved in the development of the organization-focused questionnaire employed in the data collection.)

The results of the analysis provide some preliminary insights into the cultural influence on organizational processes linked to cooperation in a multinational headquarter.

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1 INTRODUCTION

FFI-project 879 *Network Based Defense in Operations* (NBD-O) aims to increase the understanding of the transformation of the Norwegian Armed Forces toward NBD[1]. The project focuses on theoretical and empirical examinations of the concept, linked to both the technological and the organizational development. Included in this work is also an analysis of the consequences for cooperation in military operations both nationally and internationally. This overlaps with some of the aims of the NATO Concept Development and Experimentation (CD&E) project *Leader and Team Adaptability in Multinational Coalitions: Cultural Diversity in Cognition and Teamwork* (LTAMC)[2]. LTAMC's general focus is on cooperation and adaptability in multinational coalitions, where the author of this report contributes with a focus on cross-cultural organizational issues linked to cooperation in international NATO headquarters.

The LTAMC team collected data for the first time at the Deployable Joint Task Force (DJTF) HQ during NATO exercise Allied Warrior 2004 (AW04) in October/November. Data was collected on culture, cognitive readiness, personality, and organizational variables via questionnaires, observation, and semi-structured interviews. The study is considered a pilot study, as it was the first time these measures were employed together and a new questionnaire[3] developed and put into use to measure the organization-related variables.

This report presents the second part ("Part II") of the analysis of the data on cross-cultural organizational issues from the AW04 exercise, aiming is to contribute both to the LTAMC and the NBD-O projects. The main focus here is the interaction between national culture and organization. "Part I" of this report focused on the organizational issues covered in the organization-focused questionnaire (Bjørnstad, 2005). Part I also described the actions taken to revise the questionnaire based on the data collected.

The aim is to increase the understanding of the interconnections between organizational and group processes, decision-making, information-sharing, language and culture[4]. The intention is

[1] The Norwegian term for Network Enabled Capabilities (NEC).
[2] LTAMC was established in 2004 under NATO Strategic Allied Command Transformation (HQ SACT, Concept Development and Experimentation (CD&E) and is led by the U.S. Army Research Laboratory (ARL). The project is also registered as a NATO Research and Technology Organization (RTO) Human Factors and Medicine (HFM) Research and Technology Group (RTG) – 138, titled *Adaptability in Coalition Teamwork* (ACT). The currently participating nations are Canada, Norway, Sweden and the United States (Greece and the United Kingdom participate as observers).
[3] Developed within the NBD-O project at FFI.
[4] The importance of culture has been documented from many angles. For instance, stress, time-pressure, etc, typical for military operations, has been found to augment stereotyping (Khan, 2002). This is because increased

ultimately to provide important feedback, evaluation and input to the organizational development and training in NATO and PfP[5] nations in general and in the Norwegian Armed Forces in particular. This is linked to the NATO goal of transforming its forces toward NEC (NATO HQ SACT, 2004).

1.1 The AW04 exercise

The exercise was designed to certify readiness of the NATO Response Force 4 (NRF 4) from January through June 2005. The HQs for NRF 4 demonstrated this capability during the planning and conduct of a simulated Crisis Response Operations (CRO) down to the Combined Joint Force Land Component Command (CJFLCC) HQ level.

The AW04 was a command post exercise (CPX)[6] and in reality a rerun and a control of the readiness of the NRF 4, as they were officially approved on their former exercise in 2004. The personnel at the DJTF from HQ Naples were the focus of our study.

Organizational changes had been introduced in a preceding exercise in 2004, making this the second time the personnel in the DJTF exercised the new organizational structure.

The aim of this study was to research what the reorganization meant for the personnel and how this interacted with national culture.

2 METHOD

This report presents the analysis of the data from the AW04 exercise focusing on cross-cultural organizational issues, using both qualitative and quantitative measures and methods of analysis. More specifically, a combination of observation, semi-structured interviews and questionnaires were employed for the data collection.[7]

2.1 Sample and execution of study

The data-collection was carried out in the course of 6 days, November 2004. The military personnel at the DJTF from HQ Naples were the focus of our study. They counted approximately 90 persons and were from 12 different nations; the majority of whom had their daily work at the NATO HQ in Naples.

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cognitive load leads to an economization of cognitive processes. It is especially relevant to consider cross-cultural issues in multinational military operations because of the potential negative effects that stereotyping between the participating nations may have on the cooperation across nations.

[5] Partnership for Peace.

[6] I.e. run by an exercise command.

[7] For a more in-depth introduction to the case and methodology, especially pertaining to the organizational questionnaire, please se part I of this report (Bjørnstad, 2005).

We had two key informants, who gave us an overview of the exercise and the organization. 13 persons from the DJTF were interviewed and 15[8] filled out the questionnaire on organization-related topics. 11 out of these had also answered a computerized questionnaire on culture in the beginning of the exercise.

2.2 Measurements and theoretical background

The organization-related topics were measured through a newly developed questionnaire. This data was collected both through interviews and pen-and-paper questionnaires. For more details on this, please see Part I of this report (Bjørnstad, 2005).

The cultural data was collected through Meridian Global's "Globesmart" Self-Assessment Profile Tool (SAP)[9] developed in cooperation with David Matsumoto (www.meridianglobal.com; Matsumoto, 2004; Matsumoto et al, 1997; Strathman et al, 1994). The SAP contains 36 questions on culture-related topics and behaviors essential in business relations across cultures (www.meridianglobal.com). These questions give scores on six dimensions of cultural values and attitudes considered to be relevant in a business context. In addition, data were collected on demographics.

The dimensions are called: Independence/Interdependence, Egalitarian/Status, Risk/Restraint, Direct/Indirect Communication, Task/Relationship, and Short-term/Long-term Orientation.

- Independence/Interdependence (I/I) refers to whether people are primarily oriented towards and organized around the individual or the group. Group orientation is linked to tight ties between people, whereas individual orientation is linked to loose ties between people. High scores indicate interdependence (Int).
- The Egalitarian/Status (E/S) dimension refers to differences in status orientation, i.e. to which degree the people in an organization find status differences important for how they act and perceive other members of the organization. High scores indicate status (S) orientation.
- The Risk/Restraint (R/R) dimension refers to differences in willingness to engage in risk-taking behavior. People from restraint oriented cultures are more rule oriented. High scores indicate restraint (Re).
- Direct/Indirect Communication (D/I) refers to the degree to which people prefer to communicate a message in a direct or indirect manner. High scores indicate indirect (Indir) communication.
- The Task/Relationship dimension pertains to differences in whether people tends to focus on the task at hand or on the relationships in the organization in order to get the work done. High scores indicate Relationship (Rel) orientation.

[8] 5 of these questionnaires were mailed to us and arrived after the writing of Part I.
[9] Also called CSQ (Culture Standardized Questionnaire).

- Short-term/Long-term Orientation (St/Lt) refers to differences in time orientation; i.e. the degree to which people focus on today or the distant future when for instance making decisions. High scores indicate long-term orientation (Lt).

The dimensions have been validated through studies of industry and business teams in different countries (www.meridianglobal.com). There is no research publication on all the dimensions collectively, i.e. the SAP(CSQ) tool of measurement, but there are separate publications establishing the basis from which five of the dimensions have been developed (Egalitarian/Status: Matsumoto, 2004; Independence/Interdependence[10]: Matsumoto et al, 1997; background for Short-term/Long-term Orientation: Strathman et al, 1994; background for Risk/Restraint[11]: Matsumoto et al., 2003, 2001; background for Task/Relationship[12]: Schwartz & Sagiv, 1995).

It is important to be aware that different cultural dimensions developed by different researchers in the field both have differences and similarities that can easily be confused when they use the same or similar name for a dimension which may have the same core meaning, but differ in important other aspects. For instance, the I/C dimension of Hofstede and Triandis carry the same name and reflect the same in the core, i.e. to which degree a culture has group or individual orientation (Triandis, 1995; Hofstede, 1991). However, Triandis' dimension is a much more inclusive dimension than Hofstede's dimension, in that it for instance also refers to variations in power orientations (i.e. the subcategories, vertical/horizontal), which in Hofstede's system is defined as variations within a different dimension, Pd. Thus, using both Triandis' I/C dimension and Hofstede's Pd dimension, would lead to a considerable overlap in meaning of the two measurements and procure the tool's discriminate validity. The risk of using overlapping dimensions has previously been identified by many researchers in the field (see e.g., Triandis, 1995; Bjørnstad, 2000). It is a problem that may apply to the SAP dimensions from the Globesmart tool. The definitions that are used seem to be somewhat overlapping, as well as there currently being no overall validation of the dimensions used together in one tool (discriminate validity).

The SAP dimensions have much in common with the most well-established and empirically tested cross-cultural work in the field; the cultural dimension of Triandis (1995: Individualism/Collectivism) and the work related value-dimensions developed by Hofstede (1991: Individualism/Collectivism, Power distance, Uncertainty avoidance, Masculinity/Femininity, Short-term/Long-term Orientation).

Hofstede's dimensions can in short be explained as follows (Hofstede, 1991):
- Individualism/Collectivism (I/C) refers to a cultural difference in group as opposed to individual orientation. Group orientation is linked to tight ties between people, whereas

[10] Adapted from the IC Interpersonal Assessment Inventory (Matsumoto et al, 1997).
[11] Adapted from Matsumoto et al.'s tool for measuring adaptability, the ICAPS (2003, 2001).
[12] Developed from Schwartz' Value scale (Schwartz & Sagiv, 1995).

individual orientation is linked to loose ties between people. High score indicate individualism (I).
- Power distance (Pd) is defined as a difference in the actual and experienced distribution of power between people in a hierarchy. High scores indicate high Pd.
- Uncertainty avoidance (Ua) refers to a difference in need for predictability and rule orientation. High scores indicate high Ua.
- Masculinity/Femininity (M/F) refers to whether the culture values toughness, assertiveness and a focus on material success as opposed to modesty, concern for others and a focus on the quality of life. High scores indicate masculinity (M).
- Short-term/Long-term Orientation (St/Lt) refers to a difference in focus; the present versus distant future. The former indicates a propensity for action whereas the latter indicates a propensity for planning. High scores indicate long-term orientation (Lt).

Three of the SAP dimensions are, deducted from the information available, more or less similar to three of Hofstede's dimensions; Independence/Interdependence (I/I) seem to equal Individualism/Collectivism (I/C), Egalitarian/Status (E/S) seem to equal Power distance (Pd), and Short-term/Long-term Orientation (St/Lt) shares both name and much of the content with Hofstede's dimension. The Risk/Restraint (R/R) dimension has some in common with Hofstede's Uncertainty avoidance dimension (Ua) [13], and the Task/Relationship (T/R) dimension seem have some overlap with both Hofstede's Masculinity/Femininity (M/F) and Individualism/Collectivism (I/C) dimensions. The content of the Direct/Indirect Communication (D/I) seems to some extent to be covered in both Hofstede's and Triandis' Individualism/Collectivism dimension, especially pertaining to the subcategories High/Low context and Tight/Loose society of Triandis' dimension (1995).

2.2.1 Challenges of measurements

Unfortunately the data collected on culture with the SAP matches less than half of the sample that we have organizational data on[14]. This has obviously made analyses difficult, and it was deemed useful to explore other sources of cultural data. Since we had information about the nationality of almost the whole sample, we were able to match this with Hofstede's cultural data for the subjects from these nationalities. In other words, Hofstede's national scores were employed in order to provide a supplementary basis for the cultural analysis. The use of such national scores is widely used within cross-cultural research.

The choice of Hofstede's data and research to complement the SAP-data is based on this being the most well-established and researched cross-cultural data we have – especially as concerns

[13] The definition of the R/R dimension seems to have some elements in common with Hofstede's Uncertainty avoidance (Ua) dimension, i.e. the rule orientation part (www.meridianglobal.com). However, Hofstede is very clear about his dimension referring to uncertainty and not risk (Hofstede, 1991). Hence, the differences seem to be more prominent than the similarities. All in all the definition of this dimension seems somewhat unclear; risk orientation is for instance both linked to decision-making by consensus and by authority.
[14] This is true also for the demographic data; these data matches only for the same respondents as the SAP.

organizational and work related issues. His work has been corroborated and expanded through numerous other studies (e.g., Adler, 1991;Fernandez et al, 1994; Hoppe, 1998; Triandis, 1994).

3 ANALYSIS

3.1 The case (the DJTF)

Our key informant reported that the traditional J-structure had a problem; personnel did not interact across their organizational boundaries (i.e. "J-1 does not communicate with J-2."). To his understanding this motivated the alteration of the organization in this DJTF.

Moreover, based on what we learned from our key informant, the Commander had aimed to have the DJTF organized according to his understanding of how to reach the goals set by the EBO concept. The most evident example of this for the researchers was the joint structure of the CJOC (Combined Joint Operations Centre)[15]. We were informed that the traditional J-structure had been broken up and that people were put together across services into different "cells" (e.g., command group, current operations, sustainment cell, planning cell, etc). Most of the personnel had trained together and generally knew one another since 10 months back. This, we were informed, was quite unique. In other words, there had been put quite some effort into making this CJOC a team and not just an ad-hoc decision-making group. This was pointed out by our key informant and many of the interviewees as a great advantage.[16] However, it is important to underline that this was an organizational structure they had only been confronted with once before in this series of NRF 4 DJTF exercises.

3.2 Tools of measurement: evaluation

As indicated in the presentation of theory and measurement (chapter 2.2), it seemed that at least two of the dimensions of Matsumoto and Hofstede were similar enough for us to expect them to correlate. These were Matsumoto's I/I dimension and Hofstede's I/C dimension, as well as Matsumoto's ES and Hofstede's Pd dimensions; the former two pertaining to a variation in group-individual orientation, the latter two pertaining to a variation in power distribution. There were indeed found such relationships, however, in the opposite direction of what was expected; I/I was negatively related to I/C ($r=.291$, $p=.415$)[17] and ES was negatively related to Pd ($r=-.434$, $p=.210$). Of course, these relationships were not significant, and with such a small sample there could be numerous sources to this irregularity. But if the tendencies

[15] The CJOC is the central point of contact in and out of the DJTF. This is where information about the unfolding situations at the tactical end comes in and is distributed within the DJTF. The information from the field forms the basis from which orders and intent are formed and distributed back to the tactical end to be acted upon.
[16] This perception supports research within "natural decision-making", which has demonstrated that teams perform better than ad-hoc groups on decision-making (e.g., Orasanu & Salas, 1993).
[17] These dimensions were scored in the opposite direction, thereby giving the positive correlation opposite meaning.

reflect some accuracy, it could either indicate a coding error or that at least one of the measurements is less than valid or reliable. The fact that Hofstede's tool is by far the most corroborated and researched, speaks in favor of his tool. However, the fact that we have individual scores on Matsumoto's dimensions instead of aggregated scores, speaks in favor of the scores from his tool.

This confusion, together with a very small sample, has made interpreting the results somewhat difficult.

The Risk/Restraint (R/R) dimension did not show much variance for this sample, thus making it difficult to use. Therefore, there are no analyses reported that have used this dimension. This adds to the previous reservations (made in chapter 2.2) as to whether this is a good measure.

Even though carrying the same name, the St/Lt dimensions of Matsumoto and Hofstede did not prove to be related in this sample. The last two dimensions in the SAP (CSQ), D/I and T/R, did not show any relationship to Hofstede's dimensions.

3.3 INFORMATION-SHARING AND CULTURE

3.3.1 Information-pull related to Rank and Culture (I/C, I/I, Pd, ES)

There were two questions in the questionnaire measuring whether the respondents primarily pushed or pulled information. These questions were significantly correlated (r=-.45)[18]; individuals who indicated that they mostly pushed information to *many* persons, tended to indicate that the information was pushed *to* them, and those who indicated that they only pushed information to *a few* persons, tended to indicate that they pulled information *themselves* (Part I, Bjørnstad, 2005). Qualitative data suggested that the choice between these strategies might depend on the position the person had in the exercise.

Controlling for the effect of rank gave a non-significant and weaker relationship between the two variables (r=-.311, p=.382, N=8). Hence, it seems that some of the covariance in the push-pull behavior is explained by a difference in rank (i.e. there is less connection between the variables for personnel higher in the hierarchy). Controlling for culture (I/C and Pd) did not affect the relationship much.

Theory and empirical research on the effects of culture on cooperative behavior has indicated that there is a difference in willingness to cooperate with others depending on their culturally defined predispositions. Collectivistic cultures have been found to emphasize cooperation more than individualistic cultures (e.g., Cox et al., 1991; Triandis et al, 1985; Diaz-Guerrero, 1984 in Cox et al, 1991). Diaz-Guerrero found that individualistic cultures rather emphasized competition. However, while some researchers (e.g., Triandis, 1989) have suggested that

[18] $P<0.05$.

collectivism mainly predisposes to show cooperative behavior towards people from one's own group or team ("in-group"), later research (Cox et al., 1991) have shown that this tendency also extends to relations with people from other groups. The sharing of information with other members of an organization is deemed to be an example of cooperating behavior, and we hypothesized that people from collectivistic cultures would be more willing to share information (i.e. "push") than people from individualistic cultures.

The data from AW04 seems to support this supposition, even if the sample is too small to provide any significant numbers. There was found a small tendency for people from a collectivistic culture to report that they push information to more people than those from individualistic cultures (r=-.255, p=.241, N=23).

However, confusing the results somewhat, the SAP measurement, I/I, showed the opposite (r=-.343[19], p=.301, N=11); that people from an independent culture push information to more people. This is in line with the finding presented in chapter 3.2, of I/I and I/C being positively correlated while carrying the opposite meaning. This is of course only a pilot study, and it is our hope that further research will clarify such discrepancies[20].

Based on previous research it was also anticipated that a culture's degree of Pd might affect the degree to which people pull the information themselves. Low Pd has been linked to less leader supervision and more initiative from people lower down in an organization's hierarchy (see e.g. Hofstede, 1991; Bochner & Hesketh, 1994; Triandis, 1995).

There was found no relationship with the Pd scores. However, the ES dimension was found to correlate negatively with the degree to which a person reported to seek out the information him/herself (r=-.662, p=.027, N=11)[21]. This result would confirm the hypothesis, that an equality orientation is linked to more initiative to seek out information.

3.3.2 Information-flow in the hierarchy and Culture (Pd)

Different information-sharing behaviors between superior, equal and subordinate were compared (Part I, Bjørnstad, 2005). It was found that that the respondents tended to both share information with, and seek information from, equals most of the time, while information requests were most often received from superiors. The only significant difference in mean score was found between information seeking from superior versus equal (t = -3.51, p =.002); the personnel tended to seek more information from equals.

[19] Low I/I indicates the opposite of low I/C. See chapters 2.2 and 3.2 for more on this.
[20] For more on this, see also chapter 5.
[21] Controlling for rank did not affect the relationships much.

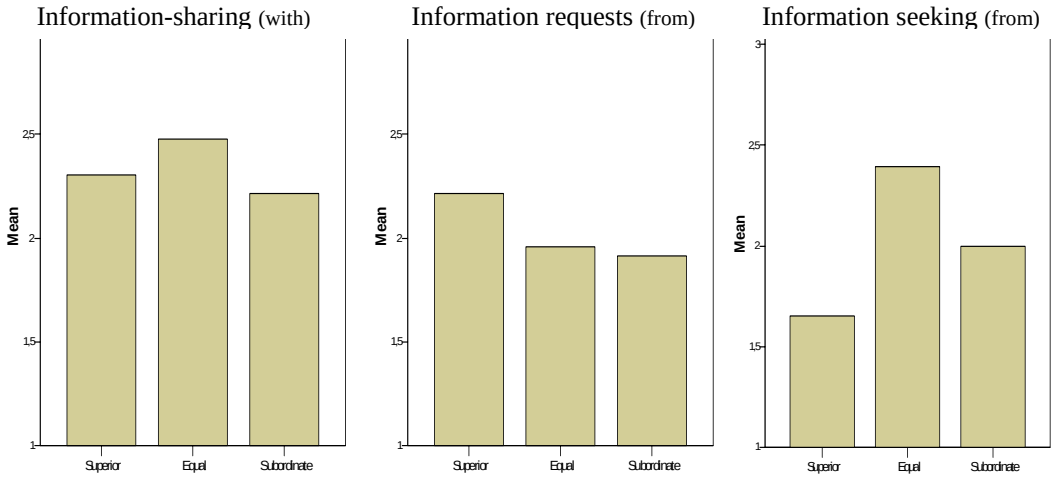

Figure 3.1. Differences in information- sharing, requests and seeking, between superior, equal and subordinate (1=min.score, 3=max.score).

We wanted to find out whether this communication pattern related to culture. Offermann & Hellmann (1997) found Pd to be negatively related to leader delegation and communication with subordinates, i.e. low Pd indicating higher leader communication. The question was whether our findings of different types of communication in the hierarchy related Pd.

The difference between information seeking from superior and equal was not found to be significantly related to Pd. Nevertheless, as Figure 3.2 shows, there were some differences in the communication pattern depending on Pd[22]. In general, lower Pd scores seemed to be related to: more information- sharing, requests and seeking with/from equal, and more information- requests and seeking from subordinate. These differences were not significant, which may be as expected from such a small sample.

[22] Results have been controlled for rank; i.e. the two enlisted (who per definition had no subordinates to communicate with) were cut from the sample in these analyses, as well as all those we had no rank information available for (n=14).

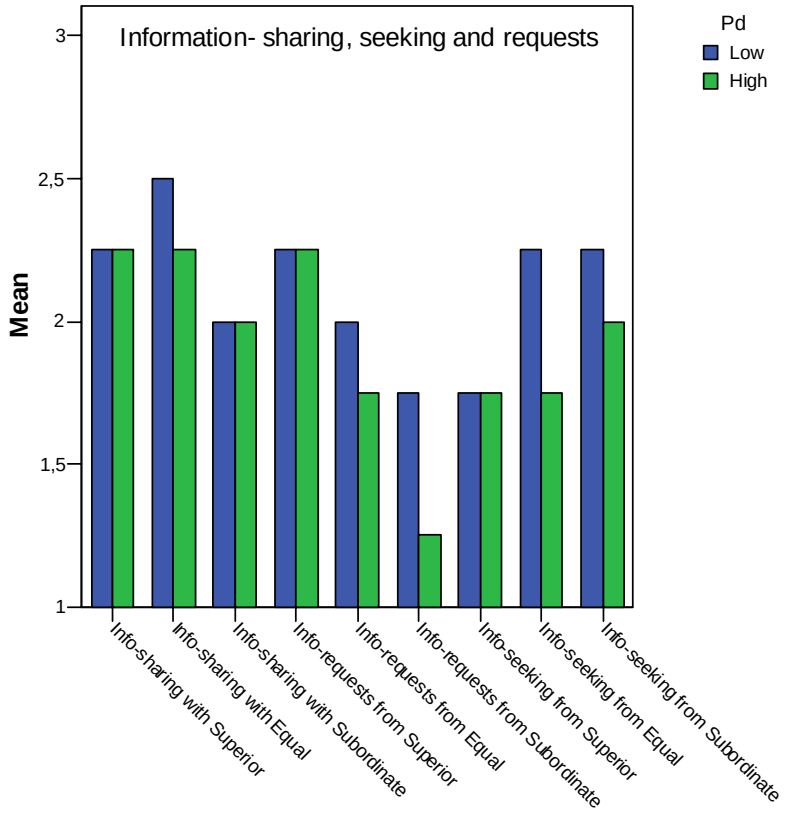

Figure 3.2. Differences in information- sharing, requests and seeking, between superior, equal and subordinate (1=min.score, 3=max.score) depending on degree of Pd (low [n=4] vs high [n=4]: blue=low, green=high.

We used sumscores[23] to see whether the *general* communication pattern would be related to Pd. As indicated above, Offermann & Hellmann (1997) found Pd to be negatively related to leader communication with subordinates. Results seem to corroborate this finding; those with low Pd report more communication both with equals and subordinates (Figure 3.3)[24]. These differences are, however, not significant, and can only be looked upon as tendencies[25].

[23] Factor analysis demonstrated a pattern of reported sharing, receiving requests for, and seeking information, which indicated that the respondents may not have differentiated much between the different types of communication they were rating (see Bjørnstad, 2005).
[24] Results have been controlled for rank; i.e. the two enlisted (who per definition had no subordinates to communicate with) were cut from the sample in these analyses as well as those we had no rank information available for (n=14).
[25] The difference in communication with subordinates depending on degree of Pd had a p-value of 0.675.

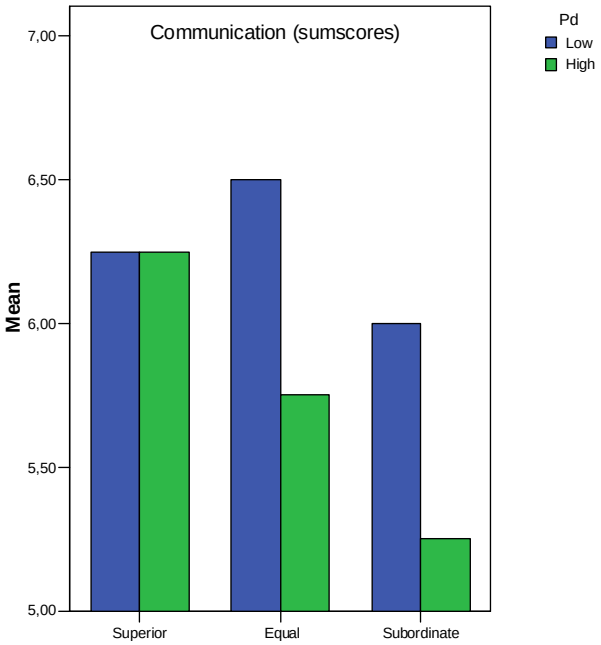

Figure 3.3. Sumscore for communication (sharing, seeking, and receiving requests for information) (3=min.score, 9=max.score) with superior, equal and subordinate, depending on degree of Pd (low vs high: blue=low, green=high).

3.3.3 Obstacles for information-sharing, and Culture (Ua)

Time constraints were rated as the most important obstacle for a person to share information, while culture was rated as the least important obstacle.

Native English-speakers were found to perceive language and culture to be a greater problem for their information-sharing than did non-native English-speakers. This is shown in Figure 3.4.

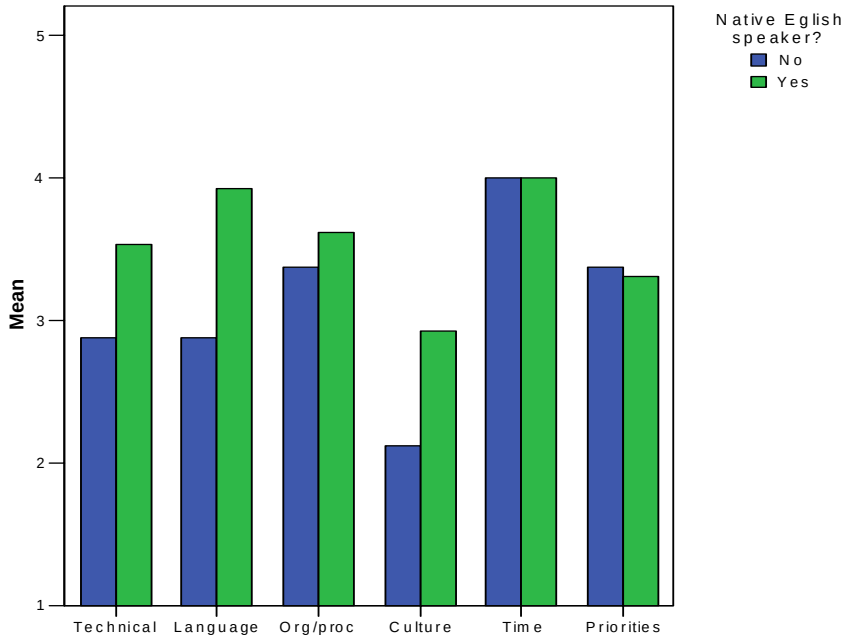

Figure 3.4. Obstacles for information-sharing: native English-speakers (n=15) and non-natives (n=12) (min.score=1, max.score=5).

Language is the one obstacle for information-sharing where people differed significantly depending on whether they were native English-speakers or not (t=-2.08, p=.05). The differences in the ratings of culture were not significant.

Ua is the cultural dimension that primarily would be expected to cause a difference in the rating of obstacles for information-sharing. Since high Ua is indicating a culture where what is different is considered dangerous (Hofstede, 1991), one would have expected that people high in Ua find differences in language and culture to be more difficult than those with low Ua. However, the data here does not support this expectation (Figure 3.5). Figure 3.5 rather shows that people with low Ua rate language, organization & processes, and time as more important obstacles for information-sharing than do those with high Ua.

In other words, Ua does not seem to influence whether people find language and culture to be a problem when sharing information, while language[26] does. However, due to the small sample, no conclusions can be made at this stage.

[26] I.e. native compared to non-native English speakers.

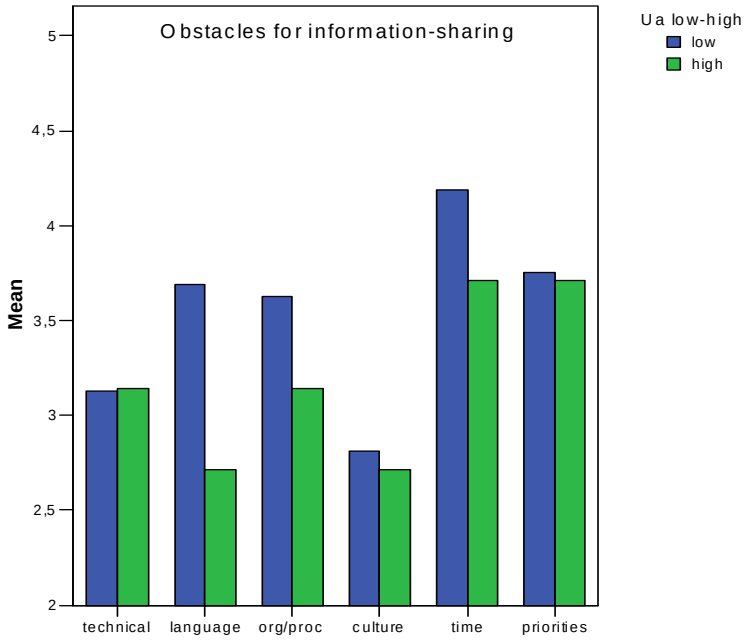

Figure 3.5. Obstacles for information-sharing: low Ua (n=17) and high Ua (n=7) (min.score=1, max.score=6).

3.4 ORGANIZATION AND CULTURE (Pd and Ua)

87% of the respondents rated this organization as different from what they were used to. A moderate majority rated the organizational changes to have been for the better.
There was found no relationship between organizational changes per se or the type of organizational changes, and the rating of the organizational changes. In other words, there were no statistical differences in how people rated the organization depending on perceived organizational changes or type of organizational changes. Ratings of the organization and the organizational changes did not show any relationship to culture either.

According to previous findings it was hypothesized that people with high Ua would be more negative to organizational change than those with low Ua (Hofstede, 1991). Splitting the file in low and high Ua showed that for those with low Ua there were no relationship between the experienced degree of organizational changes and the rating of the organization[27]. However, for those with high Ua there was found an almost significant negative relationship (r=-.718, p=.069). This means that for those from low Ua cultures, the type of organizational change experienced here may or may not have been to their liking (i.e. no relationship), whereas for those from high Ua cultures, the type of organizational change experienced here tended to be understood as negative. In other words, there seems to be some support to the hypothesis found in this sample; high Ua seems to predispose people to perceive any organizational changes as negative. This makes sense. As previously indicated (and elaborated in part I of this report; Bjørnstad, 2005), there were reports of chaos linked to the organizational changes

[27] I.e. rating this organization as “better” or “worse” than what the respondents were used to.

implemented, indicating that the environment is less predictable and more ambiguous. According to theory, people from high Ua cultures will have more difficulties dealing with this (Hofstede, 1991).

We also expected that Pd would affect how the respondents rated the organizational changes. Low Pd has been linked to liking to work in flatter and more decentralized organizations (Hofstede, 1991). Thus, we expected that those with low Pd would look more positively on the organization changes if they perceived that the organization had become flatter and/or more decentralized. There was found a positive relationship between perceiving this organization as more decentralized and rating the organization as better for those from low Pd cultures (r=.595, p=.091)[28]. There was found no relationship between centralization and/or hierarchy and rating the organization as better for those with high Pd.

3.5 GROUP ROLES AND PROCESSES AND CULTURE (Ua, Pd, ES and M/F)

3.5.1 Changes in tasks and responsibilities, and Culture (Ua)

It was found that a majority (almost 70%) of the respondents perceived their tasks and responsibilities to be different from usual in this exercise. This was found to be closely related to perceiving the organization to have changed.

Those who were given increased responsibilities in this exercise/organization tended to like the change (increase) in responsibilities[29] as well as rate the organization as better[30] (Part I: Bjørnstad, 2005). The question is whether this can be related to culture.

As previously indicated (chapter 3.4), Ua could predispose for handling change less well. The former link, made between increased responsibilities and liking the change (increase) in responsibilities, was only found for those with low Ua (r=.513, p=.042, n=16). This could mean that, in line with the findings in chapter 3.4, a propensity for disliking change (high Ua) may have affected how change was rated.

However, the latter link, between increased responsibilities and rating the organization as better, was found for both low and high Ua personnel. Seen together, these findings seem to indicate that those with high Ua do not like the change per se (increased responsibility), but that the change (increased responsibility) has a secondary effect, improving their insight into the organizational processes, thereby making the organization more predictable, less ambiguous, and thus more likable for persons from a high Ua culture. This interpretation is reinforced by the finding that increased responsibilities seemed to have a bigger effect on those

[28] The relationship was not significant, but considering the size of the sample, we found the result worth reporting. The relationship for hierarchy showed the same, but weaker tendency (r=.423, p=.256). Results from the same analyses using the ES measure of culture showed the same relationship as Pd, only weaker.
[29] r=.477, p=.025.
[30] r=.559, p<.01.

with high Ua than on those with low Ua for their rating of the organization (high Ua: r=.785, p=.037; low Ua: r=.520, p=.039). This is of course only a hypothesis at this time, which further research could clarify.

3.5.2 Cooperation and Culture (Pd, ES, M/F)

It was found in Part I that good teamwork depended on training together within the organizational structure (Bjørnstad, 2005). This was linked to research within "natural decision-making", which have demonstrated that teams perform better than ad-hoc groups on decision-making (Orasanu & Salas, 1993).

Results from Part I indicated a link between having more responsibility, being more integrated into central processes, and better cooperation (Bjørnstad, 2005). Thus, it seems that characteristics of a decentralized and flat organization, like shared responsibility and high integration of all levels, may have a positive effect on cooperation. The relationship (correlations) between these variables was re-estimated, to decide the effects of culture (Pd, M/F)[31]. Partial correlation showed that these relationships were not affected much by culture.

Results reported in Part I furthermore indicated a link between decentralization and contentment with cooperation. This could indicate that teamwork is ameliorated by decentralized control. Such an interpretation is supported by research on team decision-making; democratic leadership has been found to be more effective and advantageous in many respects (e.g., Chidester, 1990; Eisenhardt, 1989; Haleblian & Finkelstein, 1993). Using partial correlation, it was controlled for culture (Pd and ES); it did not have much effect on the relationship between decentralization and contentment with cooperation.

3.5.3 Inclusion into organizational processes related to Rank and Culture (I/C & I/I)

Three questions aimed to measure to what degree the respondents were included into the organizational and team processes. These were questions on how well they felt integrated into central processes, their activity level, and the amount of things they had to do in their position in the organization. Most respondents reported that they were quite well included into the organizational and team processes (Part I: Bjørnstad, 2005).

Inclusion into central processes, increased responsibility and culture (Ua)
Since increased responsibility was linked to increased liking of the organization, and especially for those with high Ua (chapter 3.5.1), we wanted to find out whether this could be related to the self-ratings of inclusion into organizational processes. There was found no such relationships.

[31] It was also attempted to estimate the effect of ES, however, this was precluded due to very few respondents having scores on all variables.

Can the reported inclusion into central processes be explained by rank?
According to the usual understanding based on differences in job descriptions, it seemed reasonable to expect officers to report that they were more integrated in the organization's central processes than enlisted personnel. According to this, the personnel's self-reported inclusion into central processes should correlate with rank. There was a small but consistent tendency for higher rank to be related to reporting to be more integrated, have more things to do and have a higher activity level (p=.274, r=.415; r=.500, p=.141; r=.302, p=.367; respectively, N=11[32]). So even though there was no significant numbers found here, we find this to be a plausible connection that has a reasonable chance to be confirmed in later studies with larger samples.

Can the reported inclusion into central processes be explained by culture?
There was found no significant relationship between culture and the reported inclusion into central organizational and group processes. This was quite according to expectations; there was no reason to presume that culture should affect this.

However, one could expect that having a similar cultural make-up as the leading nation in the organization, would make it easier to be included in the central processes. The strongest relationship was found between the sumscore for integration[33] and the cultural dimension I/I, reflecting group versus individual orientation (r=.578, p=.063, N=11). This indicates that high integration may be related to the cultural orientation independence. The almost significant relationship corresponds to expectations, in that independence is a typical cultural make-up of the US culture, the country which is also dominant in the organization. Excluding US respondents from the sample did not affect the relationship much (interdependence: r=.516, p=.127, n=10), which indicates that the connection does not only mirror the national culture of the respondents from the dominant nation in the exercise. Controlling for language through a partial correlation, affected the relationship only in a positive direction; it made the relationship to I/I significant (r=.659, p=.038).

The relationship between the sumscore for integration and the dimension I/C, also reflecting group versus individual orientation, make the results more contradictory (r=.325, p=.122, N=24)[34]. This relationship indicates that high integration is related to collectivism. This could mean that collectivists are better at getting integrated, or simply that they *feel* more integrated than individualists would have done in the same situation. Controlling for language weakened the relationship to I/C (r=.209, p=.338) further. This is not surprising, considering that I/C is significantly correlated with language proficiency while I/I is not (r=-.736, p=,000, N=24; r=,053, p=,877, N=11 respectively). This is probably to some extent explained by the difference in type of scores; I/I contains individual scores for less than half the sample, while I/C are national group scores for almost the whole sample. Furthermore, US and UK

[32] Enlisted: n=2, officers: n=9.
[33] Higher score means less integrated!
[34] I/I indicates the opposite of I/C. See chapters 2.2 and 3.2 for more on this.

respondents all score maximum on English proficiency at the same time as they represent cultures with the highest scores on individualism (Hofstede, 1991).

As previously indicated (chapter 2.2, 3.2, 3.3.1), it is beyond any doubt that the relationship between the I/C and I/I dimensions need to be clarified in further research. We anticipate that the relationships between integration and individualism/collectivism (I/C and I/I) will be better understood in follow-up studies[35].

Can the relationships found between inclusion into central processes and the communication pattern be explained by culture?
It was found that the communication pattern was related to whether the respondents reported being included into organizational and team processes (Part I: Bjørnstad, 2005). We wanted to find out whether the previously found positive relationship between information-seeking from superior and feeling more integrated, busier and having more to do, could be explained by culture (Pd). There was found no relationship. As Figure 3.2 shows, degree of information-seeking from superior seemed to be unrelated to culture (Pd).

It was furthermore checked whether the positive relationship between having more to do and sharing information and communicating with subordinates was related to culture (Pd). This was not found to be related to culture either. Figure 3.2 indicates that degree of information-sharing with subordinates was unrelated to culture (Pd). Figure 3.3 did, however, indicate a relationship between communication with subordinates and Pd; low Pd indicating more communication with subordinates. But the relationship between Pd and reporting to have more to do turned out to be the opposite; low Pd indicating having less to do. Hence, none of the connections between communication pattern in the hierarchy and inclusion into central processes made in part I of this report (Bjørnstad, 2005), could be explained by culture.

3.6 SOCIAL IDENTITY AND CULTURE (I/C)

In part I it was found that the team and the assignment meant most in creating a sense of belonging for our respondents (Bjørnstad, 2005). Age and gender was found to be the least important.

The only affinity which seemed to be related to culture was assignment; I/C was related to rating assignment as important ($r=-.386$, $p=.062$, $N=24$)[36]. This means that the respondents from collectivistic cultures tended to rate common assignment as more important for their sense of belonging than what the respondents from more individualistic cultures did.

[35] See chapter 5.
[36] I/I had the opposite relation to the rating of affinity ($r= -.524$, $p=.089$, $N=11$) (I/I indicates the opposite of I/C. See chapters 2.2 and 3.2 for more on this), which confuses the results somewhat. As previously indicated, this is not surprising considering how these dimensions are opposite related. But as this is only a pilot study, we expect further research (for more on this, see also chapter 5) to clarify such discrepancies.

In general, group belonging is more emphasized in collectivistic than in individualistic cultures (e.g., Hofstede, 1991; Triandis, 1995). To find out whether this was reflected in our sample, it was checked whether there was a difference in how important the respondents rated affinity. There did not seem to be any difference in how they rated the importance of the affinity in general.

In part I (Bjørnstad, 2005) there was also found a link between finding affinity to be important and an aid to get the job done, and finding the assignment to give a sense of belonging, indicating that a sense of belonging can help people working on the same assignment to get the job done. From another angle, this may also indicate that having a common goal (in terms of assignment) brings people closer (in terms of cooperation and group belonging/identity)[37]. Culture (I/C, I/I) did not seem to affect this relationship much. In other words, it appears that this link is valid for both individualists and collectivists alike.

3.7 CONTROLLING BEHAVIOR, TRUST AND CULTURE (Pd, ES, Ua, and I/C, I/I)

3.7.1 Tendency for controlling behavior and Culture (Pd, ES and Ua)

There was found a tendency for people from low Pd cultures to expect their subordinates to manage on their own, while people from high Pd cultures were more liable to expect subordinates to need close guidance (Part I: qualitative data analysis). People from low Pd cultures also tended to reveal more positive attitudes towards their subordinates than did people from high Pd cultures. This supports findings from cross-cultural organizational research (e.g., Bochner & Hesketh, 1994; Clegg, 1981; Hofstede, 1991; Offermann & Hellmann, 1997). Bochner & Hesketh, for instance, found that higher Pd was related to a preference for closer supervision and a belief in the necessity of having to make people work hard. Clegg found high Pd to be linked to controlling behavior on the leader's part.

What we wanted to find out here was whether this could be supported by the quantitative data; was there a link between the self reported controlling behavior and the Pd, ES and Ua dimensions of culture? There was found no such relations in our data.

3.7.2 Trust and Culture (IC/II and Ua)

There were two questions pertaining to how the respondents generally related to people from different cultures and how they trusted them. 36,4% reported that there were differences in how they related to people from different cultures, while 50% said that there were no

[37] This is in line with classic research on group processes; common goals and mutual dependency has the ability to create a common identity (i.e. psychological sense of belonging; see e.g. Hogg & Abrams, 1988) and to bring people even from conflicting groups together in cooperation (Sherif et al, 1961).

differences. Very few (13,6%) said that they trusted people from other cultures less than people from their own culture. However, it was also found that trust depended on familiarity and ability to understand and knowing what to expect from the other person/culture (Part I; Bjørnstad, 2005).

Research indicates that the cultural dimensions I/C and Ua may affect people's tendency to trust people from different cultures (Cox et al., 1991; Hofstede, 1991). Is there a tendency for people scoring high on collectivism to find it more difficult to trust people from other groups than their own (because the in-group is of higher importance for people in collectivist cultures; e.g., Triandis, 1995) or are they on the contrary better at trust, even in people from other groups than their own (as found by Cox et al., 1991)? And does the tendency toward perceiving what is different as dangerous of high Ua cultures (Hofstede, 1991) make it harder for them to trust people from different cultures than their own?

Results show that no relationship was found between the direct question on trust and the cultural dimensions (I/C, I/I, Ua)[38]. However, the question on whether the respondents related differently to people from other cultures, revealed correlations with both the I/C and the Ua dimensions; I/C was negatively related (r=-.366, p=.078) and Ua positively related (r=.408, p=.048). This indicates that respondents from individualistic and low Ua cultures tended to report that the culture of the other person influenced how they related to them. Collectivists and high Ua persons, on the other hand, tended to distinguish less between how they related to people from different cultures.

3.8 DECISION-MAKING & CULTURE AND LANGUAGE & CULTURE

Analyses of decision-making and language in relation to culture did not provide any results.

4 SUMMARY AND DISCUSSION

4.1 INFORMATION-SHARING AND CULTURE

There was found a small tendency for people from collectivistic cultures to report that they push information to more people than those from individualistic cultures. This was in line with expectations; collectivism has previously been linked to more cooperative behavior, while individualism has been linked to competitive rather than cooperative behavior.

It was also checked for a link between information-sharing in the hierarchy and culture (Pd).

[38] As indicated in Part I, the question on trust has been revised in the new version of the questionnaire, due to the sensitivity of the topic and the consequent low variance in the answers. Because of the low variance, the lack of findings here was not surprising, and attributed to the problems of measurement.

It was found that those from a low Pd culture reported more total communication both with peers and subordinates than did those from a high Pd culture. This was in line with previous research having found Pd to be negatively related to leader communication with subordinates.

As high Ua may predispose for handling the unknown less well, it was found plausible that Ua would influence how people rated certain obstacles for their sharing of information. However, our results indicated no link between Ua and whether people find language and culture to be a problem when sharing information. But due to the small sample, no conclusions can be made at this stage. On the other hand, native English speakers rated language (and culture[39]) significantly higher as a problem than did non-natives.

4.2 ORGANIZATION AND CULTURE

High Ua predisposes for handling change (esp. chaos and ambiguity) less well, and it was anticipated that Ua could affect the rating of organizational change. For those with high Ua there was found an almost significant negative relationship between the experienced degree of organizational change and the rating of the organization. High Ua seemed to predispose people to perceive any organizational change as negative.

It was found that respondents from a low Pd culture who perceived the organization to be more decentralized, tended to rate the organization positively (almost significant positive relationship). This was in line with expectations; low Pd should make it more natural to work in flatter and more decentralized organizations. However, there was found no relationship for high Pd cultures. This is of course only a very small sample, making it risky to read too much into the results. Nevertheless, it would be interesting to follow up on this. Is it possible that people from low Pd cultures find it harder to adapt to a more centralized organization than people from high Pd cultures find it to adapt to a more decentralized organization?

4.3 GROUP ROLES AND PROCESSES AND CULTURE

The significant link between increased responsibilities and liking it, was only found for those with low Ua. This could mean that, in line with the findings in chapter 3.4, a propensity for disliking change (high Ua) may have affected how change was rated. However, there were indications that those with high Ua did not like the change per se (increased responsibility), but that the increased responsibility has a secondary effect - improving their insight into the organizational processes and thereby making the organization more predictable, less ambiguous, and thus more likable for persons from a high Ua culture.

[39] Culture was only almost significant.

There was found no link between culture and how the respondents rated cooperation. Nor was culture found to influence the previously found relation (Part I) between responsibility, integration and cooperation, and between decentralization and cooperation.

We wondered whether having a similar cultural make-up as the leading nation in the organization, would make it easier to be included in the central processes. The strongest relationship was found between integration (sumscore) and independence. It seems that this cultural aspect may have some influence on organizational inclusion. However, results were somewhat confusing in that the variable's relation to the I/C dimension indicated the opposite; that integration was related to collectivism. This was attributed to discrepancies in the instruments of measurement, which, as indicated previously, there is a need to clarify for further research[40].

None of the connections between communication pattern in the hierarchy and inclusion into central processes made in part I of this report, could be explained by culture.

4.4 SOCIAL IDENTITY AND CULTURE

Assignment was the only social affinity which seemed to be related to culture. Respondents from collectivistic cultures tended towards rating common assignment as more important for their sense of belonging than what their colleagues from individualistic cultures did.

There did not seem to be any cultural difference in how the respondents rated the importance of the affinity in general.

The link found in part I, between finding affinity to be important and an aid to get the job done, and finding the assignment to give a sense of belonging - indicating that a sense of belonging can help people working on the same assignment to get the job done, was found to be valid for both individualists and collectivists alike.

4.5 CONTROLLING BEHAVIOR, TRUST AND CULTURE

There was found no link between self reported tendency for controlling behavior and culture (Pd, ES and Ua) in the quantitative data. However, as reported in Part I, there was found a link to Pd in the qualitative data.

Respondents from both individualist and low Ua cultures tended to report that the culture of the other person influenced how they related to them. Collectivistic and high Ua persons, on the other hand, tended to distinguish less between how they related to people from different cultures. As indicated in chapter 3.7.2, these results seem to go mostly in the opposite direction

[40] Also discussed in 3.2.

of previous research. Due to the small number in our sample, we do not want to put much into the interpretation of this. However, the finding that respondents from high Ua cultures tend to report that they do not make any differences in how they relate to people from various cultures may reflect an effect of them being more rule oriented; they may believe it is correct not to make any difference and report their behavior accordingly. This is of course little more than speculations. As far as the link with I/C is concerned, it is interesting to note that even though collectivists are more group oriented and therefore also more aware of, and sensitive to, differences between groups, they do not report to differentiate more, rather less. A question for further research would be check whether this is found in larger samples, and if so, why it is that individualists may differentiate more.

5 LIMITATIONS

The most obvious limitation to this study is the sample size. In line with this, it is urged that the reader look upon the results here as only preliminary. The type of analyses conducted bares also witness to this; they are based on the simple statistics possible to conduct considering the sample size. As indicated in Part I (Bjørnstad, 2005), two follow-up studies are already planned for within the LTAMC project.

The MeridianGlobal (Matsumoto) scores on culture were only available for under half of the original sample (N=11), which obviously made the analysis difficult. Also, as indicated initially, chapter 2.2 and 3.2, this measurement tool (SAP/CSQ) has not been as thoroughly validated as one may have wished for[41]. It was felt that an additional cultural parameter would add value to the analysis. For that reason Hofstede's country scores were also included for almost[42] all the respondents in the whole sample (N=23), used as an alternative cultural measurement in the analyses. However, as these are average scores for each culture, and not individual scores, the accuracy of the analyses is of course somewhat lower. The use of such country scores, are nevertheless, widely used within cross-cultural organizational research. Also, at least in this study, the analyses seemed to demonstrate higher construct validity for the Hofstede scores than the SAP scores.

6 CONCLUSION

This pilot study has provided some initial analyses of the links between organizational processes and culture in a military headquarter. The results presented here are preliminary, but does, however, give us an indication of the many influences that culture can have on the

[41] This is also a point for further research; it would definitely be a great advantage to include another measurement of culture that has been more thoroughly explored.
[42] Save those respondents (n=5) that were from nations not included in the Hofstede study.

processes in such an organization. It is expected that the follow-up studies planned for, will lend us the needed data to allow us some wider and more generalizable results.

References:

Adler N J (1991): *International dimensions of organizational behavior.* (2nd ed) Boston: Kent.

Bjørnstad A L (2005): *Part I: Allied Warrior 2004 - Pilot study and analysis of cross-cultural organizational issues.* FFI/RAPPORT-2005/01709.

Bjørnstad A L (2005): *Culture, organization and cooperation: an analysis of the cooperation in a multinational organization.* Cand. Polit. thesis: NTNU, Trondheim.

Bochner S & Hesketh B (1994): Power-distance, Individualism/Collectivism and job-related attitudes in a culturally diverse work group. *Journal of cross-cultural psychology,* 25 (2): 233-257.

Chidester T R, Kanki B G, Foushee H C, Dickinson C L, Bowles S V (1990): *Personality factors in flight operations: volume I. Leadership characteristics and crew performance in a full-mission air transport simulation* (NASA Tech. Mem. No. 102259). Moffett Field, CA: NASA Ames Research Center.

Clegg S (1981): Organization and control. *Administrative science quarterly,* 39: 89-117.

Cox T H, Lobel S A, McLeod P L (1991): Effects of ethnic group cultural differences on cooperative and competitive behavior on a group task. *Academy of management,* 34, 827-847.

Fernandez et al, 1994): Hofstede's country classification 25 years later. *The Journal of social psychology,* 137 (1):43-54.

Eisenhardt K M, Bourgeois L J (1988): Politics of strategic decision-making in high velocity environments: toward a midrange theory. *Academy of management journal,* 31, 737-770.

Haleblian J & Finkelstein S (1993): Top management team size, CEO dominance, and firm performance: the moderating roles of environmental turbulence and discretion. *Academy of Management Journal,* 36 (4), 844-863.

Hofstede G (1991): *Cultures and organizations: software of the mind.* London: McGraw-Hill.

Hogg M A & Abrams D (1988): *Social identifications: A social psychology of intergroup relations and group processes.* London: Routledge.

Hoppe M H (1998): Validating the masculinity/femininity dimension on elites from 19 countries. Hofstede G (Ed) *Masculinity and femininity: the taboo dimension of national cultures*. Thousand Oaks, CA Sage Publications.

Khan, S R (2002): Stereotyping from the perspective of perceivers & targets. In W J Lonner, D L Dinnel, Hayes, Satter (Eds) *Online readings in psychology & culture,* Unit 15, chapter 3.

Matsumoto, D. (2004). Individual and cultural differences in status differentiation: The Status Differentiation Scale. Manuscript currently submitted for publication.

Matsumoto D, LeRoux J A, Iwamoto M, Choi J W, Rogers D, Tatani H and Uchida H (2003): The robustness of the Intercultural Adjustment Potential Scale (ICAPS): The search for a universal psychological engine of adjustment. *International Journal of Intercultural Relations*, 27, 543-562.

Matsumoto D, LeRoux J, Ratzlaff C, Tatani H, Uchida H, Kim C and Araki S (2001): Development and validation of a measure of intercultural adjustment potential in Japanese sojourners: The Intercultural Adjustment Potential Scale (ICAPS). *International Journal of Intercultural Relations,* 25, 483-510.

Matsumoto D, Weissman M, Preston K, Brown B and Kupperbusch C (1997): Context-specific measurement of individualism-collectivism on the individual level: The IC Interpersonal Assessment Inventory (ICIAI). *Journal of Cross-Cultural Psychology,* 28, 743-767.

NATO HQ SACT / IS-NNEC IPT (2004): *NATO Network Enabled Capabilities Foundation Document.*

MeridianGlobal (2005): www.meridianglobal.com

Offerman L R & Hellmann P S (1997): Culture's consequences for leadership behavior: National values in action. *Journal of cross-cultural psychology*, 28 (3): 342-351.

Orasanu J & Salas E (1993): Team decision making in complex environments. In Klein G A, Orasanu J, Calderwood R, Zsambok C E (Eds) *Decision making in action: models and methods* (327-345). Norwood, New Jersey: Ablex Publishing Corporation.

Sherif M, Harvey O J, White B J, Hood W R, Sherif C W (1961): *Intergroup conflict and cooperation. The Robber's cave experiment.* Norman: University of Oklahoma.

Strathman A, Gleicher F, Boninger D S, Edwards C S (1994): The consideration of future consequences: weighing immediate and distant outcomes of behavior. *Journal of personality and social psychology*, 66:4, 742-752.

Schwartz S H & Sagiv L (1995): Identifying culture specifics in the content and structure of values. *Journal of cross-cultural psychology,* 26(1), 92-116.

Triandis H C (1995): *Individualism and collectivism.* Boulder, CO: Westview Press.

Triandis H C (1994): Cross-cultural industrial and organizational psychology. Triandis H C, Dunette M D & Hough L M (Eds*) Handbook of industrial and organizational psychology*, 54 (2): 323-338.

Triandis H C, Leung K, Villareal M, Clack F L (1985) Allocentric versus idiocentric tendencies: Convergent and discriminant validation. *Journal of research in personality,* 19: 395-415.