

The “Systematizing Person-Group Relation (SPGR)” Method and its Application. A Study of Culture-based Differences in Team Dynamics*

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The purpose of this paper is twofold : first it gives an overview of the “Systematizing Person-Group Relation” (SPGR) model and method, and second, it presents an empirical study based on data collected from Korean, Japanese, Norwegian and American workgroups. The samples of groups are compared by their pattern of social interaction using two different SPGR analyses : the field and predominant behavior (vector) analysis. THE FINDINGS INDICATE THAT THREE CULTURE GROUPS SHOW SIMILARITY OF INTERPERSONAL EVALUATION HOWEVER AMERICAN GROUPS SHOW AN EXCEPTION. The implications of these findings are discussed in relation to leadership, strategy development, teambuilding, and conflict resolution. In addition the typical group dynamics for the four different cultures is described.

Keywords : SYMLOG(System for Multiple Level Observation of Groups)

INTRODUCTION

The purpose of this paper is twofold : first we will introduce the SPGR (Systematizing Person-Group Relation)

model as a theory for understanding group processes, and second, we present the findings from a major study of group dynamics in Japanese, Korean, Norwegian, and North American workgroups using the SPGR instrument.

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The SPGR model

In this part we will present the basic concepts of the SPGR model together with its theoretical foundations.

Four basic group functions

The concept of 'group functions' was first introduced by Parsons (1951; 1953). The concept is central in our further discussion. When carefully reading the more popular models on group development, we find quite striking similarities. The idea that the predominant behavior of a group differs in the course of its existence seems to be fairly well-established. It also seems like most models agree on what behavior relates to what kind of problem the group faces. While Parsons (1953) suggests four basic functions of groups, Tuchman and Jensen (1977) describe four phases of group development and McGrath (1991) four modes in which groups may perform. It is fairly easy to see how the four functions, phases or modes are assumed to meet similar challenges. Even the more psychoanalytical models like Bion's (1961) model of group emotionality reflect similar patterns. For an overview of models for group development, see Chidambaram and Bostrom (1996), Jern and Hempel (1999), Poole and Hollingshead (2004) or Sjøvold (2006). The Parsonian approach is one of the more productive when trying to understand the life of groups. We will rest our discussion in this paper on a model for group development that builds on the Parsonian thinking called SPGR (Systematizing the Person Group Relation, Sjøvold 1995, 2002, 2006).

The four basic group functions are, according to the SPGR model, 'Control', 'Nurture', 'Opposition', and 'Dependence' (see Table 1). The basic idea is that a group activates the function best suited to meet the specific problem they face. If the problem at hand is instrumental, then the Control function is activated; if the problem is relational, the Nurture function is activated and so on. When one of the functions is activated the predominant behavior of the group members reflects that active function. When the Control function is active,

analytical, task-oriented or even autocratic behavior dominates; when the Nurture function is active, caring, empathic or even spontaneous behavior dominates; if the Opposition function is active, critical, assertive or even self-sufficient behavior dominates; and when Dependence is active, passive, conforming, and obedient behavior dominates. An overview is given in Tables 1 and 2. Since an active group function is always reflected in group behavior, systematic observation of behavior is an efficient tool to investigate these phenomena. This is the approach used to study the groups referred to in this paper.

Group functions, balance and maturity

The construct 'group constitution' is defined as the balance of basic group functions. A group may activate one function to solve a specific problem and activate another to solve another problem. On the other hand a group may be stuck in one function even though that function is not adequate to meet the challenge the group actually faces. This phenomenon is similar to what Bion (1961) refers to as basic assumption groups in contrast to his high-performance 'work group'. The SPGR parallel to Bion's 'work group' is a mature group (Sjøvold 1995, 2005, 2006).

A *mature group* is a group capable of rapidly activating the group function best suited to meet any challenge at hand. To achieve such flexibility all members of the group need to be capable of performing behavior that supports all of the four functions. In less mature groups, members tend to take on roles according to their zone of comfort, and limit their behavior to support one basic function. In such groups one member may be the caring person (Nurture), another person the achiever (Control) and so on. However, in a flexible group, communication between members needs to be both distinct and rapid. Perceptions of the situation need to be shared, evaluated, decided and acted upon in a very short period of time. When all members are capable of recognizing and performing behaviors that support all four functions, this

process is almost instant. The 'one person-one role' group will be less flexible since each member perceives the situation and other member's actions as well through the eyes of his or her role. Considerable/Significant negotiation needs to be done before the group is able to act.

Balance is an important concept of the SPGR model. 'Balance' is, however, not equivalent to the concept of equilibrium like Bales (1953, 1955) describes as a homeostatic controlled status quo. 'Balance' is a constant shift and polarization between active group functions. Consequently members of a group free themselves from fixed roles and they become capable of performing behavior that supports all functions. This is a state of free flow that is characteristic for highly creative teams (Csikszentmihalyi and Csikszentmihalyi, 1988). A well-functioning or well-balanced group can be compared to a gyroscope. It is the speed of rotation that makes it stable and robust. The 'one person-one role' group may balance the group function by having an equal number of supporting roles, but such a group will respond very slowly and be vulnerable to environmental change.

As shown in Tables 1 and 2 there are two more aspects of group constitution used in our analyses, namely *Synergy* and *Withdrawal*. Synergy appears in groups where the basic group functions are well-balanced and characterized by engagement and constructive goal-oriented teamwork. At a lower level of maturity where members still commit to their initial role preferences, they tend to restrict themselves from contributing to the common group work, which in turn results in passive behavior and resistance, i.e. *Withdrawal*.

Group tasks and effectiveness

Group maturity, as defined here, is closely related to role structure. The more specific roles group members assume, the less flexible and responsive the group will be. The interdependence of individual and group development is also obvious. As members expand their behavioral repertoire and skills, the group also becomes a better

arena for learning. The individual needs the group to develop, and the group will only develop through its members (Mills 1984). Innovative groups have a high capacity to learn and are, in our terminology, mature.

However, all groups do not need to be innovative or mature to be effective. Group effectiveness is a highly flexible concept (McGrath 1991; Gersick 1988; Hackman 1983, 1992, 2002). In this paper we define group effectiveness as how well group resources are mobilized to solve a specific task. Groups may be effective even when operating on a low level of maturity. Effectiveness is always related to group task and context. The more complex tasks are, and the more unpredictable the context is, the more mature the group needs to be for success. If the task is simple or dividable and the context is fairly structured, a fixed role structure may be more effective and more forceful due to its ability to be focused. No creative noise distracts them from fulfilling their task. A team of surgeons and nurses who perform their specialized tasks in a strictly coordinated manner under the senior surgeon's command is a good example. The SPGR model suggests four levels of maturity. For each level group members achieve new shared capabilities. The detailed descriptions of these levels are beyond the scope of this paper.

The SPGR model represents a concept for understanding group dynamics. On this theoretical base the SPGR instrument is developed. The SPGR instrument (s) is/are constructed to tap elements of group dynamics like the social field of the group, its role structure, subgroup formation, polarization, latent conflicts, etc. SPGR supplies the researcher or consultant with graphic displays to facilitate feedback for their sessions. More details on the instrument are given in the chapter on methods and materials.

Behavior and cultural differences

After this brief introduction to the SPGR model we will jump to the topic of our empirical study concerning

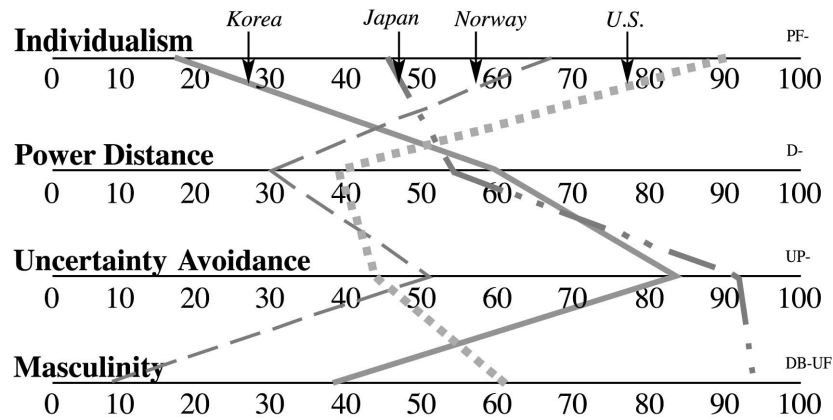


Figure 1. Korean, Japanese, Norwegian and North American cultures described in four dimensions.

differences in group dynamics between national cultures.

In his well-known/renowned study of national cultures, Hofstede (1980) found similarities between the Korean and Japanese cultures that differed from the American and Norwegian cultures in three out of four dimensions (Figure 1), indicating a significant difference between Asian and Western cultures.

Using the SYMLOG method (Bales & Cohen, 1979) and an algorithm for polarization analysis (Polley, 1985), Sjøvold (1995, 2005b) investigated the dynamics of Korean, Norwegian and North American workgroups. He found striking similarities between Korean and Norwegian groups that differed from the American groups both in their tendency to polarize (subgroup formation) and type of polarization. While the Korean and Norwegian groups seems to tolerate high levels of polarization, the American groups are mostly unified. The predominant type of polarization in the American groups seems to be of the type “either are you with us-or you are against us” while the Korean and Norwegian groups are more concerned of social equality and relations.

The finding that the North American groups are the ones that are different questions the existence of a difference between the Asian and the Western worlds in these aspects. It could as well be a difference between

North America and “the rest”. Since most of the models and theories of groups in our field stems from research on North American groups, they may not be as universal as they think if this is true.

Below we will present a further investigation of these findings that primarily uses the sophisticated SPGR algorithms for analysis on a larger sample of groups and extended to include Japanese workgroups.

RESEARCH QUESTIONS OF THIS STUDY

This study has been conducted in order to find out answers about following questions :

- (1) An explorative comparison of group polarization in different cultures on SPGR space; US, Norway, Korea and Japan
- (2) A comparison of characteristics of cultural groups in SPGR space
- (3) To find out the application possibility of SPGR to the researches of cross-cultural areas.

METHODS AND MATERIALS

Materials, sampling and analysis

This study is based on a total of 6208 peer and self ratings in 315 American, 220 Norwegian, 135 Korean

Table 1. Elements of group constitution.

Dimension	Group function	Short description
C-N	Control	Structure, logic, authority
	Nurture	Caring, social orientation, openness
O-D	Dependence	Loyalty, conformance, submission
	Opposition	Criticism, rebellion
W-S	Withdrawal	Passive resistance
	Synergy	Engagement, constructive goal-oriented teamwork

and 32 Japanese workgroups. The data were gathered using the standard SPGR 24-item behavior scale. All scales were in the subject's native language. The translations were performed by a standard translation-back-translation technique (Sjovold, 2002). Each member of the group studied rated their fellow group members and themselves on what behavior they typically displayed in the group.

The SPGR instrument

In this paper we base our discussion on SPGR measures. The Systematizing Person-Group Relations (SPGR) instrument consists of a category system for observation of overt behavior in groups and several scales for self and peer ratings (Sjøvold, 1995, 2002). This study is based on peer ratings using a 24-item scale where each item was rated according to whether the behaviors never or seldom occurred (1), sometimes (2), and often or always (3).

SPGR inherits the psychometrics of the SYMLOG-instrument and in this study the authorized SYMLOG behavior scale (Bales & Cohen, 1979) was used. This scale has an internal consistency (Cronbach's alpha) that is typically reported at .73 and split-half (Spearman-Brown) that is typically reported at .80-.86. Inter-rater reliability is typically reported at .98. Coefficient for pattern gestalt is typically reported to be between .94 and .98. Test-retest typical values are .87, and sample reliability typical values are between .97 and .99 (Koenigs, Hare & Hare 2002, Koenigs et al., 2005, Sjøvold 2002).

SPGR is based on Bales' (1985; 1999) theory of social interaction systems, Parsons' (1953) functional model of group development and Bion's (1961) theory of group emotionality. SPGR inherits the psychometrics of the SYMLOG-instrument (Bales & Cohen, 1979, Hare, 1985, Koenigs, Hare and Hare, 2002, 2005). However, the three SPGR dimensions have different orientations in the factor analytical space. The SPGR dimensions are labeled Control-Nurture (C-N), Opposition-Dependence (O-D), and Withdrawal-Synergy (W-S). A short description of the dimensions is given in Table 1.

The pairs of the first two dimensions represent what is defined as basic group functions (Control-Nurture and Opposition-Dependence) and the pairs of the third dimension are indicators of a group's maturity (Withdrawal-Synergy).

Within each group the basic group functions are supported by a distinct set of behaviors. Groups differ in the predominant behavior they display. One may define these differences as a measure of the cultural characteristics of groups. However, such differences may also act as characteristics for larger social systems like organizations or even national cultures as in this study. The results of these dimensions are presented in more detail along twelve vectors in the SPGR factor analytical space. The vectors are shown in Figure 4 and described in Table 2. The vector code indicates which dimension it belongs to; Control vectors are labeled C1 and C2 and so forth.

Table 2. The SPGR behavior vectors.

Vector	Codeede	Typical behavior
Engagement	S1	Engaged, inviting others to contribute
Caring	N1	Taking care of others, attentive to relations
Acceptance	D2	Passive, accepting
Creativity	N2	Creative, spontaneous
Criticism	O1	Critical, opposing
Resignation	W1	Sad appearance, showing lack of self confidence
Self-sacrifice	W2	Passive, reluctant to contribute
Assertiveness	O2	Assertive, self-sufficient
Ruling	C2	Controlling, autocratic, attentive to rules and procedures
Loyalty	D1	Obedient, conforming
Task-orientation	C1	Analytical, task-oriented, conforming
Empathy	S2	Showing empathy and interest in others

SPGR analysis applied in this study

The SPGR instrument consists of a set of analyses (extracted/taken) from the analysis of the social fields to patterns of polarization and group typology. In this study we base our discussion on the Average Field analysis and Vector analysis.

The average field analysis

The SPGR field analyses are presented on a three sector template. In the upper sector behaviors that support the “Control” group function(s) are plotted, in the lower right sector behaviors that support “Nurture” and the lower left behaviors that support “Opposition” are plotted (Figure 2). In Figure 2 the primary focus of each sector (“System”, “Relations” and “Myself”) is marked.

For feedback purposes the results that form a group analyses can be presented by drawing each member of the group as circles of different sizes. The size of the circle indicates a person’s influence in the group and the Euclidian distance between the circles represents the relational closeness between group members. In Figure 2A we see a group where members display equal influence and are close together. This is what we call a unified group. Figure 2B displays a group that is divided into two distinct subgroups. This is what we call a polarized group. One of the subgroups also displays a higher level of influence (larger circles) than the opposing subgroup.

The examples in Figure 2A and B display results from the group level where each circle represents one person. However, in the same way aggregated results may be

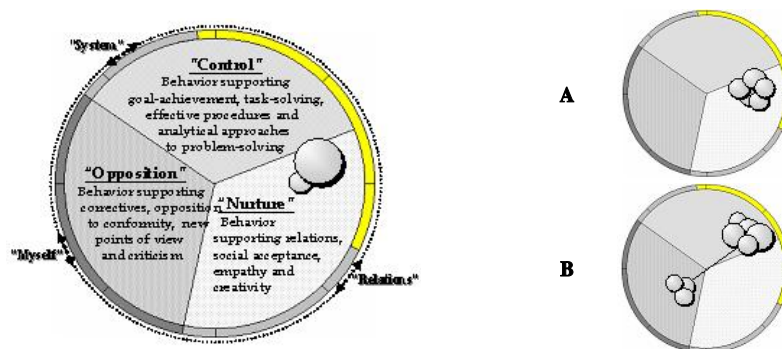


Figure 2. The SPGR space with samples of A: a unified group, and B : , a polarized group. Each of the circles in the diagram represents one group member.

displayed for an organization or even a national culture. In this study each circle in Figure 3 represents the average results for each of the four national cultures we have studied.

The vector analysis

While each of the circles in a field analyses represents the average location in the SPGR space, the vector analysis gives a more detailed analysis of the behavior one group member displays. The field analyses are efficient for feeding back results when the dynamics of the group is the topic, while the vector diagram is more efficient for feedback to individual members of the group. The SPGR space consists of twelve different vectors (Table 2, Figure 4).

As for the field analysis we could use vector analyses on aggregated data like an organization or a national culture. In this study the vector analysis is used to display the typical pattern of behavior in the workgroup

studied for each of the four national cultures.

A further discussion of the technical issues of the SPGR methodology is found in the SPGR manual (Sj øvold 2002).

RESULTS

The average field analysis

In Figure 3 the average field position for each national culture space is plotted in the SPGR space.

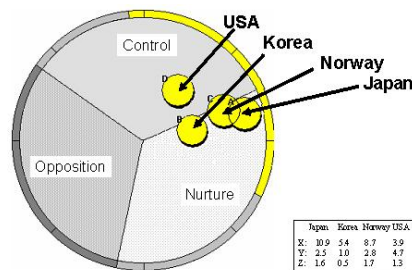


Figure 3. Average field position of the four different cultures.

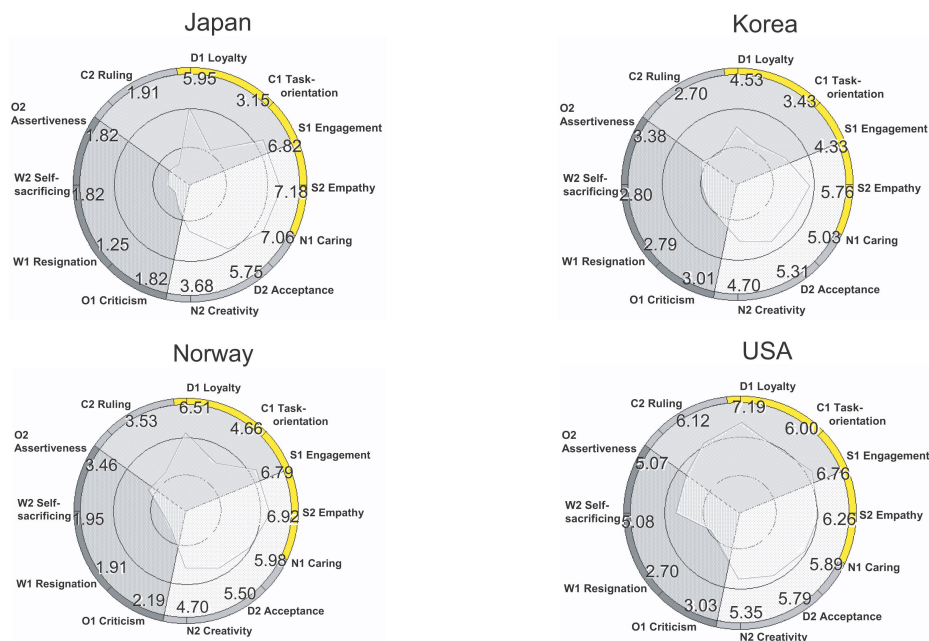


Figure 4. Vector scores for Japanese, Korean, Norwegian and American groups displayed in the SPGR space. The white area represents the cultural profile for each sample of groups.

Table 3. Differences between USA, Norway, Korea, and Japan.

	USA (N=3562)	Norway (N=1604)	Korea (N=909)	Japan (N=130)			
	<i>M/SD</i>	<i>M/SD</i>	<i>M/SD</i>	<i>M/SD</i>	<i>F</i>	<i>Sig.</i>	η^2
S2 Empathy	6.26 (2.21)	6.92 (2.12)	5.76 (2.32)	7.18 (2.05)	67.37	.000	.03
N1 Caring	5.89 (2.35)	5.98 (2.30)	5.03 (2.60)	7.06 (2.13)	45.65	.000	.02
D2 Acceptance	5.79 (2.16)	5.50 (2.25)	5.31 (2.16)	5.75 (2.20)	15.12	.000	.01
N2 Creativity	5.35 (2.15)	4.70 (2.38)	4.70 (2.53)	3.68 (2.32)	55.20	.000	.03
O1 Criticism	3.03 (2.36)	2.19 (1.93)	3.01 (2.37)	1.82 (1.77)	75.33	.000	.03
W1 Resignation	2.70 (1.96)	1.91 (1.61)	2.79 (2.27)	1.25 (.83)	166.28	.000	.04
W2 Self-sacrificing	5.08 (2.04)	1.95 (1.62)	2.80 (2.11)	1.82 (1.68)	1261.28	.000	.48
O2 Assertiveness	5.07 (2.64)	3.46 (2.25)	3.38 (2.52)	1.82 (1.68)	297.68	.000	.11
C2 Ruling	6.12 (2.22)	3.53 (2.37)	2.70 (2.14)	1.91 (1.51)	1027.52	.000	.31
D1 Loyalty	7.19 (2.08)	6.51 (2.25)	4.53 (2.13)	5.95 (2.12)	385.30	.000	.16
C1 Task-orientation	6.00 (2.28)	4.66 (2.20)	3.43 (2.34)	3.15 (2.19)	389.32	.000	.16
S1 Engagement	6.76 (2.34)	6.79 (2.16)	4.33 (2.38)	6.82 (2.14)	277.10	.000	.12

Note : The Levene statistics showed that the assumption homogeneity of variance was violated for all variables except S2 Empathy. This indicates an inaccurate *F*-value, and the Welch statistics are reported for these variables. The Welch statistics was chosen since it is more powerful and more conservative than the Brown-Forsythe. The strength of η^2 is interpreted according to the guidelines from Cohen (1988) : .01= small effect, .06= moderate effect, and .14= large effect.

While the Japanese, Korean and Norwegian groups balance their positions between control and nurture, the American group's average position favors control (Figure 3).

Vector analysis

The vector analyses are displayed in Figure 4 and the numerical results are listed in Table 3.

Overall the Korean, Norwegian and Japanese groups display a similar pattern of behavior compared to the

American groups who scored significantly higher than the others on the vectors *Task-orientation*, *Ruling*, *Assertiveness* and *Self sacrificing*. Even though this is the most striking difference, we find that the Japanese groups score significantly higher on the vectors *Empathy* and *Caring* and significantly lower on *Ruling* than the other samples (Figure 4, Table 3).

A one-way, between-groups analysis was conducted to see if there was any difference between the countries. The result of this analysis is presented in Table 3.

As can be seen there were statistically significant differences at the $p < .001$ level for all 12 vectors. Despite reaching statistical significance, the actual difference in mean scores between the countries on D2 was low, while for S2, N1, N2, O1, W1 was moderate to low. O2 and S1 were from moderate to large while W2, C2, D1, and C1 were large.

Post comparison using the Games-Howell¹⁾ resulted in/provided/displayed the following :

S2

Japan came out with the highest mean on Empathy followed by Norway. Their mean was significant higher than both USA and Korea, $p < .000$, while there was no difference compared to Norway. The mean for Norway was also significantly higher than both USA and Korea, $p < .000$, while the mean for USA was significantly higher, $p < .000$, than Korea.

N1

Japan came out with the highest mean which was significantly higher than the remaining countries, $p < .000$. There were no significant differences between Norway and USA; both countries were significantly higher, $p < .000$, than Korea.

D2

Concerning Accept, USA had the highest mean together with Japan, which was significantly higher, $p < .000$, than both Norway and Korea. There were no significant differences between Norway and Korea.

N2

USA received the highest mean on Creativity; it was significantly higher than the other three countries. There were no differences between Norway and Korea, where

the mean was significantly higher, $p < .000$, than Japan.

O1

USA and Korea showed/displayed a significantly higher mean, $p < .000$ on Criticism than both Norway and Japan, while the differences between Norway and Japan were not significant.

W1

Korean and USA resulted in a significantly higher, $p < .000$, mean on Resignation than both Norway and Japan. Japan came out significantly lower, $p < .000$, than Norway.

W2

On Self-sacrificing the mean from USA came out significantly higher, $p < .000$, than the other three countries. Korea also came out significantly higher, $p < .000$, than both Norway and Japan, while there was no significant difference between Norway and Japan on Self-sacrificing.

O2

USA came out with a significantly higher mean, $p > .000$, on Assertiveness than the other three countries. There were no differences between Norway and Korea on Assertiveness. However, the mean for both Norway and Korea was significantly higher, $p < .000$, than the Japanese mean.

C2

On Ruling the American mean was significantly higher, $p < .000$, than the other three countries. Norway came out with the second highest which was significantly higher, $p < .000$, than both Korea and Japan, while the Korean mean was significantly higher, $p < .000$ than the Japanese mean.

D1 :

On Loyalty the mean for USA was significantly higher, $p < .000$, than for Norway, Korea, and Japan. Norway

1) The Games-Howell procedure was chosen since the equal variance assumptions for groups was violated and numbers for the groups was not equal.

showed/displayed the second highest mean which was significantly higher than both Korea, $p < .000$, and Japan, $p < .025$. While the mean for Japan was significantly higher than Korea's, $p < .000$.

C1 :

On Task-orientation the mean for USA was significantly higher, $p < .000$, than the mean for the other three countries. Norway's mean was also significantly higher, $p < .000$ than both Korea and Japan, while there was no difference between Korea and Japan.

S1 :

The mean on Engagement for Japan, Norway and USA was significantly higher, $p < .000$, than the mean from Korea. There were no significant differences among Japan, Norway and USA for this vector.

DISCUSSION

More than fifteen years ago we conducted a study to investigate the differences in group dynamics between workgroups from the western and eastern worlds. Our hypothesis at that time was based on the findings of Hofstede and others and the study included North American, Norwegian and Korean groups. To our surprise the findings showed similarities between the dynamics in Norwegian and Korean groups that were strikingly different from the North American groups. The present study is based on a larger sample and includes Japanese groups. The common assumption that there is a division between western and eastern worlds in human social behavior is indeed not supported by this study. The dynamics of the western groups (USA and Norway) are uniquely similar for only one vector (N1) while the Norwegian groups have strong similarities (no significant difference) with Japanese groups on four vectors (S1, O1, W2, S1) and with the Korean groups on three vectors (D2, O2, N2). Although there are similarities

between the Asian and Norwegian groups, their dynamics are distinctly different. However, this is also true for the Japanese and Korean groups which have strong similarities for only one vector (C1). Moreover, our results clearly show that the North American groups are those that differ the most. Overall the predominant behavior in these groups is more controlling, task-oriented, assertive and self-sacrificing. The other groups are characterized by emphasizing behavior that is empathic, caring and loyal.

The displays in Figure 4 show that the North American groups are characterized by showing "more" behavior (the white is larger) than the other groups. In other words, they differ in the relative distortion towards the upper left area of the SPGR space. American society is characterized by a high degree of both racial and cultural diversity, in contrast to the much more homogeneous Japanese, Korean and Norwegian societies, which have been stable for centuries. Such factors may help in explaining our findings. Differences in patterns of social behavior are expressions of fundamental value orientations in society, and are therefore internalized at a very early stage in life and not easily altered. As such these value orientations may cause severe barriers for efficient communication in cross cultural teams if they are not brought to awareness.

Below we will briefly describe the characteristics for each of the four cultures according to our findings before we discuss their impact.

Characteristics of the Japanese groups

In our sample from four different cultures the Japanese groups display the highest level of behaviors labeled as Caring, Engagement and Empathy (N1, S1 and S2) and the least level of behaviors labeled Ruling, Criticism, Assertiveness and Resignation (C1, O1, O2 and W1). In Figure 4 we see that the balance of the Japanese profile is distorted towards the Nurture part of the space indicating that members of these groups most frequently display, and are attentive to, behavior that support

relations and social acceptance. Very little controlling and opposing behaviors are displayed in these groups. The field analysis (Figure 3) summarizes this observation by the location of the average Japanese group in the Nurture sector and farthest away from the Opposing sector.

From the field analysis we also see that the largest distance between any of the locations is between the Japanese and the North American groups. Comparing the four groups by the vector analyses supports the finding that these two groups are the most different because in none of the twelve vectors are the Japanese and North American groups the most similar among the four. By contrast the Japanese and the Norwegian groups are the most similar of the four. Comparing the two Asian groups we find that those are most similar for only one of the vectors (C2), and this similarity is weak.

Characteristics of the Korean groups

Comparing the Korean groups with the others we see that they display the lowest level of behavior labeled Caring and Loyalty (N1 and D1) of the four. Being high on Criticism and Resignation (O1, W1) these groups show more similarities to the North American groups in these aspects than their Japanese counterparts. The Korean groups also differ from the Japanese groups in their lower levels of Loyalty, Engagement and Empathy (D1, S1, S2). In Figure 4 we can see that the Korean profile fills less of the upper right corner than the Japanese, but more in the Opposing sector of the SPGR space.

From the field analysis we see that the location of the Korean groups is closer to the North American groups than the Japanese, but that the distance is still considerable. The profiles shown in Figure 4 illustrate how large these differences are. When compared to the Japanese groups the Koreans show the most similarities for only one (C2) of twelve vectors, while they show strong similarities on three vectors (D2, N2, O2) with the Norwegian groups.

In summary the dynamics of the Korean groups have a much "higher temperature" than the Japanese groups. The members are more confrontational and they are not as conforming. In spite of these differences their profile is still distorted towards the Nurture sector indicating that behavior that supports relations and caring are important.

Characteristics of the Norwegian groups

We stated above that the Norwegian and the Japanese groups were the most similar, and that this western country is most similar to the North American groups for only one (N1) of twelve vectors. Even though the most similarities are found between the Norwegian and the Japanese groups, it is worth noting that the two types of groups are significantly different. An outside observer will describe them as quite different in appearance. On the other hand comparing the Norwegian groups with North Americans, the Norwegians would almost look "Japanese" (Figure 4). This is also illustrated by the relative distance in the field analysis (Figure 3).

The dynamics of the Norwegian teams are fairly balanced between instrumental task-oriented and caring-relational-oriented behavior. Although some assertive behavior may be displayed, this is by far the most typical. However, Norwegians are much more direct and confrontational than the Japanese, but not as much as the Koreans.

Characteristics of the North American groups

The North American groups are "the different ones". While the behavior profiles (Figure 4) for all other groups are skewed towards the Nurture sector, the profile of the North American is skewed towards Control. In practical group work this means that they will appear much more conforming and concerned about rules and authority and the "correct" way of solving a particular task. The other groups will in comparison be more apt to break "rules" that are perceived as threatening to the

relational stability of the group. Even the task completion may be set aside if such a threat is perceived to be sufficiently strong. Individual assertive behavior is more prominent in the North American groups, but since assertiveness is combined with a high level of Self-sacrificing, this does not necessarily mean that members of North American groups are more direct and outspoken in their communication. It could as well be quite contrary since free and direct communication requires a level of trust that is more prominent in highly relational groups than in highly conforming groups.

The differences discussed above have several obvious consequences for practical day-to-day group participation and leadership, some of which will be briefly discussed below.

Implications for cross-cultural communication and interventions

Cross-cultural management brings new meaning to the term situational management. When operating in foreign cultures managers can no longer trust their internalized interpretations of social behavior. Successfully fulfilling the role expectations of a manager in a foreign culture therefore is extremely difficult.

Roles are the meeting points between the person and the social system. The members of a group change their role relations all the time. Under such dynamic circumstances the basis for operating the role-system in a group needs to be stable enough to give its members a feeling of security. However, at the same time it needs to be flexible enough for the group to be able to adapt to constantly changing challenges. This is essential for the efficiency and survival of the group and may be jeopardized in cross-cultural teams. Even exchanging managers across cultural systems may cause immediate problems. According to our findings an average American manager placed in a Norwegian workgroup will easily be perceived by the group members as autocratic, blunt, and lacking empathy. A Norwegian manager in an

American group will easily be perceived as irresolute, vague, and insufficiently oriented towards results.

Literature on cross cultural communication often emphasizes a division between a Western and an Asian way of relating to business organizations. Our findings suggest that this picture is more nuanced. Important differences appear between Western cultures and striking similarities appear across the west-east "divide". Today we see business as increasingly globalized, which for most practical concerns means a greater North American influence. This will have impact on several important aspects of the art of doing business and will, if our findings are true, include some challenges. We have investigated differences in group dynamics which includes/comprises the underlying patterns of social interaction. These patterns govern how group members interpret the intentions behind overt behavior and how they perceive the value expressed in others' stated points of view and actions. In cross cultural teams that deal with less structured problems, and/or in unstable situations, the probability for misunderstandings and bad decisions are high. Even though a group follows a strictly structured procedure to perform their work, perceptions of what is really going on will be different depending on the member's cultural base. Good examples are found in literature on TQM that compares Japanese and US production plants. The Japanese success in the seventies was mainly due to differences in perception of meaning. In this perspective we may easily see that developing and implementing a shared strategy in a cross cultural organization may be problematic. When comparing approaches on team building and conflict resolution, it is even more obvious that they need to be different. At least in Norway, North American textbooks and literature are widely used in educating students in organizational theory and management training. In the light of our findings it is high time to question the validity of this practice. Most activities in business organizations are supposed to bring growth and new knowledge to the

group. If successful, such activities have to be transformed into situations where all parties in the situation win. An approach that facilitates a win-win situation in one of the four cultures in our study will not necessarily succeed in another. There is good reason to believe that management and OD techniques that are successful in one culture may fail in another. The story of worldwide implementation of MBO is a good example of this. Working in native teams across cultures is challenging, but working in cross cultural teams is even more complicated. The need for more knowledge of team dynamics in cross cultural teams is scarce, but in high demand.

Before we conclude we want to emphasize that we have investigated overt behavior, and not the intention behind the observed behavior or the actual outcome. Our interest and discussion are on the dynamics of the groups and not whether something is good, bad, better or worse. Our findings points to some, in our opinion, interesting differences. What dynamics work best will always depend on the task at hand, the general situation, the group structure, its members and, not least, the national culture. Problems appear when members of a group have different perceptions of what is going on and act on erroneous grounds. This is where results from the kind of studies presented here may help.

Issues on this study and suggestions for future research

In this study we included Japanese groups. However, the relatively low number of groups suggests that these results may not be typical for the Japanese culture. Further research should therefore include more groups from this culture. It would, of course, also be interesting to include more nations in the study, but even more interesting would be a qualitative approach that investigates specific business situations in depth.

CONCLUSION

We have presented the SPGR model and method as a tool to investigate the dynamics of groups and organizations. We have also presented results from a study of Japanese, Korean, Norwegian and North American groups using the SPGR instrument. However, the number of Japanese subject is somewhat limited.

We found that the North American groups are significantly different compared to the other samples, and the largest difference is between the North American and Japanese groups. This finding compared with the similarities between the Japanese, Korean and Norwegian groups shows no evidence of a difference between a Western and a Eastern world concerning group dynamics. Quite the contrary the North American groups differ so much that it is more reasonable to talk about North America and the rest.

Some implications of these findings are that techniques for leadership, strategy development, team building and conflict resolution that prove successful in North American groups will probably at best have no effect on groups from the other nationalities. In conflict resolution they will most probably reinforce the ongoing conflict.

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“개인 및 집단 관계 시스템”(SPGR) 방법론과 그 적용에 관한 연구

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본 논문의 연구 목적은 다음의 2가지를 가지고 있다: (1) “개인 집단 관계 시스템(SPGR)에 대한 개관, (2) 한국, 일본, 노르웨이, 미국 등 4개 문화의 근무집단으로부터 수집된 자료에 대한 문화비교적 분석연구 실시. 이상 4개 이문화에서 수집된 집단 자료는 SPGR 분석 방법인 “장 분석” 및 “지배적 행동(벡터) 분석”을 통해서 사회적 상호 작용 유형을 비교하였다. 본연구에서 얻은 결과에 의하면 미국 문화를 제외한 3개 문화 즉 노르웨이, 일본 및 한국은 상호 유사한 대인 평가 유형을 보여주었다. 추가적으로 리더십, 전략개발, 팀 빌딩 그리고 갈등 관리를 SPGR모델에 입각해서 다루고 마지막으로 4개 문화 집단에 대한 집단 역동을 논의하였다.

주제어 : **SYMLOG**(집단을 관찰하기 위한 다차원 시스템)

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