Supporting Distributed Team-building Using GSS: A Dialogue Theory-based Framework

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Abstract

Literature review on Group Support Systems (GSS) shows that most prior GSS research focuses on supporting face-to-face team work, relatively less research has been conducted on the support of distributed team work, and even less research has been conducted on the support of distributed team-building. When global team work is becoming more common in organizations, how GSS can be used to enhance distributed team-building is another important research issue. This paper proposes a dialogue theory-based team-building framework, which aims to support distributed team-building. Based on this framework, a set of testable propositions is formulated. Implications of the derived framework are discussed in serving to provide some suggestions for researchers of team behavior and organizational users of GSS.

1. Introduction

Distributed team work is an important enabling mechanism of emerging virtual organizations (Turoff et al. 1993). Although there exists a rich GSS research literature regarding the support of team work, most prior GSS studies have been conducted in face-to-face (FtF) decision room settings (e.g., Dennis, Haley and Vandenberg 1996). *Distributed team work* has been insufficiently studied in GSS literature (notable exceptions include the studies performed by Chidambaram (1996), Chidambaram and Jones (1993), Burke and Chidambaram (1995), and Turoff et al. (1993)). Further, relatively little empirical data on the support of *distributed team-building* is available in GSS literature.

Surveys show that the vast majority of U.S. companies have realized that "team development is important to the success of their organizations...but a significant number of companies tend to neglect team building, failing to include it as part of the corporate philosophy, objectives, or reward system" (Dyer 1995; p.9). Team work has often not been as productive as expected (Jessup and Valacich 1993); one of the possible reasons is that teams are not well built up before performing various tasks (Larson and LaFasto 1989). Some typical symptoms often observed in organizations that signal the need for team building are: loss of production or output, increased number of complaints from team members, conflicts or hostility among team members, ineffective team meetings, decisions misunderstood or not carried through properly, complaints from customers (both internal and external) and poor quality of service (Dyer 1987). Hence, more efforts are warranted toward studying team building.

In modern organizations, a global distributed team such as a distributed software development team or CAD/CAM team is becoming increasingly common (Rayport and Sviokla 1994). Distributed team is one of the most important components of emerging virtual organizations (e.g., Lucas 1996). Most prior GSS research focuses on how to support specific task activities of a team, with little attention paid to team-building. *Distributed team-building should be the precursor of an effective distributed team work.* Especially in distributed team settings, some types of social interactions in FtF settings such as coffee talk or cocktail parties, which can often help to enhance interpersonal relationships among team members and team building, do not exist. As a result, a special and separate session of team building may become even more important. If a distributed team is not well built up, such that shared values and meanings are not properly generated or commonly accepted, members can hardly collaborate with each other to accomplish a task together. The work performance of this distributed team would be hampered because team

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work is essentially a collaborative activity (Larson and LaFasto 1989; Turoff et al. 1993). Consequently, distributed team-building should be another important research area for GSS researchers.

What is distributed team building? According to the Encyclopedia of Sociology (Borgatta and Borgatta 1992), a team essentially consists of four basic elements: (1) **common identity or basis** -- grounded in shared values, experiences, and goals; (2) **structure** -- interaction patterned in terms of statuses and roles; (3) **interdependence** -- some degree of members' mutual reliance on each other for needed or valued material and non-material resources; and (4) **history** -- some regularity or frequency of interaction over time.

Of these four basic team elements, *the common basis* is the most fundamental one for distributed team building. Without the common basis of shared goals and values, team members could hardly really understand and trust each other. Thus, it would be difficult to establish *the team interdependency*, and it would be difficult for the team members to comfortably accept *the team structure* (e.g., roles and statuses) although team roles and statuses may be forcefully defined or assigned. As a result, more and frequent team interactions over time (i.e., *the team history*) may be simply a waste of time. Thus, the discussions of distributed team building in this paper focus mainly on *the common basis*.

The next section briefly reviews the relevant research literature and theories. Section 3 derives a dialogue theory-based team-building framework. Section 4 develops a set of testable propositions based on the derived framework. The last section discusses implications of the framework.

2. Background

2.1. Literature Review

Some field studies in social psychology as well as some consultation work in team diagnosis provide interesting insights for team-building. Dyer (1987), an experienced consultant, found out that an effective and well built up team had *clear overall goals*, had appropriate materials and member qualifications, was relaxed, and had appropriate leadership for implementation. Ancona (1990) argues that most prior research in social psychology mainly studied teams as closed systems, but many current teams are open systems with members and their interactions beyond their borders. Hence, she suggests that study on teams or groups should balance the internal and external perspectives. In many cases, external strategies of a team and the interaction of team activities are the team's key process variables which strongly affect its work performance. After a three-year study of real teams, Larson and LaFasto (1989) have identified eight properties of effectively functioning teams: a clear and elevating *goal*, a results-driven structure, competent team members, unified *commitment*, *a collaborative climate*, standards of excellence, external support and recognition, and principled leadership. *In summary*, the review on the field studies and consultation work in team diagnosis indicate that helping team members to *keep in touch with thoughts and feelings* is very important to team-building (e.g., Lau 1988a; 1988b; Orpen 1986).

2.2. Dialogue Theory

Dialogue theory (e.g., Bohm 1990; Isaacs 1993; 1994; Schein 1993) in organization science provides a suitable theoretical foundation for deriving a framework for team-building, as it helps us to understand the building of a team that can generate *shared team meanings* (Bohm 1990) and can *think together* (Schein 1993). Conceptually, shared team meanings can include shared team values, goals, and experiences, which correspond to *the common basis* of a team (Borgatta and Borgatta 1992). For a team to think together, it should have a shared common basis as the precursor. In other words, the dialogue theory can help a team to build up ***a common basis*** for thinking together.

An important goal of dialogue is to *reveal the incoherence in people's thoughts*, and to enable a team to reach *a higher level of consciousness* and creativity, without being at the expense of personal freedom and interest (Schein 1993). It can help team members to *keep in touch with thoughts and feelings* (e.g., Lau 1988a; 1988b; Orpen 1986), which is essential to team-building as suggested by the field studies and consultation work in team diagnosis discussed earlier.

Three key attributes of dialogue include "container", "suspension", and "laser". A ***container*** can be understood as the sum of assumptions, shared intentions, and beliefs of a team (Isaacs 1993). "To ***suspend*** something is, at as were, to keep it 'hanging in front of you', constantly accessible for questioning and

observation" (Bohm 1990). The power of a team (after a dialogue) could be compared to a laser. ***Laser*** produces a very intense beam which is coherent, and the light waves build up strength because they are all going in the same direction, and the beam can do all sorts of things that ordinary light cannot (Bohm 1990).

A big *container* for a dialogue is necessary for creating a climate and a set of explicit or implicit norms that permit people to handle "hot issues without getting burned" (Schein 1993). This big container, which include all kinds of ideas, beliefs, and comments, can help to avoid or at least reduce the human being's "defensive behavior" (Argyris 1985). Further, *suspension* is important for resolving the problem of the very nature of thought, because thought continually deludes us into a view that "this is the way it is" (Bohm 1990), which often prevents us from deeper questioning and observation. To minimize the defensive behavior and encourage deeper questioning and observation, "psychological safety" is very important (Schein 1993).

The Dialogue Project at MIT has adopted and developed the dialogue theory, and conducted a series of field studies to explore the impact of the theory. It has also provided a specific and operational procedure for conducting a dialogue (e.g., Schein 1993), on which this research is mainly based:

(1) Organize the physical space to be as nearly a circle as possible. Whether or not people are seated at table or tables is not as important as *the sense of equality* that comes from sitting in a circle; (2) Introduce the general concept of dialogue, then ask team members to think about an experience of *good team communication*; (3) Ask each team member to share with their neighbor about the experience and try to *characterize that experience* (this works because people are relating very concrete experiences, not abstract concepts); (4) Ask each team member to share their past experiences of good communication/characteristics and write them on a flip chart; (5) Ask the team to *reflect on these characteristics* by having each member in turn talk about his/her reactions; (6) Let the conversation flow naturally once everyone has commented; (7) Intervene as necessary to clarify or elucidate, using concepts and data that illustrate the problems of communication; (8) Close the session by asking everyone to comment in whatever way they choose.

This procedure eventually leads a team to a high level of team consciousness, out of which forms meanings that are genuinely shared (Bohm 1990). Further, *all the dynamics of team-building (e.g., the four basic elements of a team) occur in parallel with the process of conducting a dialogue, and dialogue is the root for any effective teams* (Schein 1993). In this way, this dialogue procedure may well support team-building.

2.3. Learning Organization Theory

Learning organization theory (Senge 1990) examines ways and methods to enhance organizational learning, so that organizations can cope with the dynamically changing world more effectively and efficiently. There are five disciplines in this theory: systems thinking, shared vision, mental models, team learning, and personal mastery. Two related disciplines that can supplement the dialogue theory are the mental models and shared vision.

The **mental models discipline** focuses on the openness needed to unearth assumptions and shortcomings in our present ways of seeing the world, thus *influencing how we understand the world and how we take action* (Senge 1990). The concept of mental models has been widely used in psychology (Johnson-Laird 1983), computer science (Carlson and Ram 1990), human-computer interaction (Staggers and Norcio 1993), and organization science (Porac and Thomas 1990; Senge 1990). "The discipline of managing mental models -- surfacing, testing, and improving our internal pictures of how the world works -- promises to be a major breakthrough for building learning organizations" (Senge 1992: p.4).

The problems with mental models lie not in whether they are right or wrong -- by definition, all models are simplifications. The problems with mental models arise when the models are tacit -- when they often exist below the level of awareness (Senge 1992). The discipline of working with mental models starts with *turning the mirror inward*; learning to unearth our internal pictures of the world, to bring them to the surface and hold them rigorously to scrutiny (this procedure is called *inquiry*) (Senge 1990). Because surfacing mental models can help members to understand themselves and others better, a basis can be formed for generating shared team meanings (i.e., the common basis of a team). In this way, the mental models discipline can *supplement the dialogue theory* to further enhance the generation of shared team meanings.

The **shared vision discipline** fosters commitment to a organization in a long term. One pre-condition for a successful organization is its shared goals or visions. IBM has the shared vision of quality service and Polaroid has the one of instant photography. The shared vision discipline provides a guideline about how a team can define and generate visions (or goals) that can be really shared. *Shared team visions should emerge from personal visions* where a team derives the energy of fostering its commitment; as a result, team members can be binded together around *a common aspiration and sense of destiny* (Senge 1990). Further, the shared team visions/goals can provide a team with the necessary *motivation* (e.g., Locke and Latham 1990) for conducting a *dialogue, which is missing within the dialogue itself* (e.g., Schein 1993). In this way, the shared vision discipline can *supplement the dialogue theory* in supporting team-building.

3. A Dialogue Theory-based Team-building Framework

Based on the above theoretical analysis, a dialogue theory-based team building framework, as shown in Figure 1, can be derived. The concept of GSS can be embedded into this framework to support distributed team building.

(1) Team members attend a dialogue which aims to support team-building by generating shared team meanings (i.e., the common basis of a team). Before a formal dialogue begins, team members have a Small-Talk to introduce themselves in terms of name, sex, some background information, and even sharing jokes (Goerge 1987; Jarvenpaa and Knoll 1996) (e.g., using e-mail or HTML home pages in a distributed team setting). The purpose of this informal and relaxing small talk is to make it easier for team members to put aside their formal roles and mentalities (Dyer 1987). The brackets "( )" used in Figure 1 denote *a complementary relationship*, such as the one linking IG and TG (see box (2) of Figure 1), which means that the team goal (TG) is complemented with the individual goal (IG).

(2) At the Corner Stone stage, team members have a dialogue on defining and generating shared team goals. A team goal is an objective or end result that a team seeks to achieve, and a status of affairs that a team values and toward which a team works (Johnson and Johnson 1987). Generating shared team goals is very important to the success of a team (Dyer 1987; Larson and LaFasto 1989; Locke and Latham 1990), especially to a new team (Adams 1988; Hare 1992).

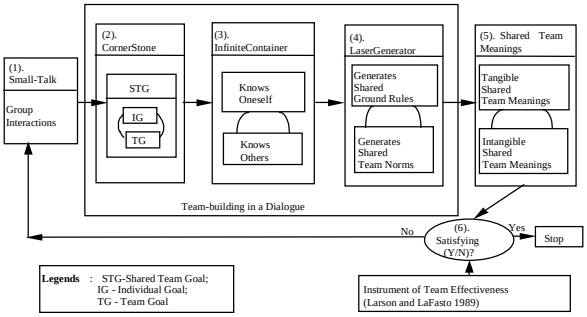

Figure 1 A Dialogue Theory-based Team-building Framework

The shared vision discipline provides a guideline for generating shared team goals (Senge 1990). *First*, team members start to disclose their own purposes or goals for joining the team (Jarvenpaa and Knoll 1996). *Second*, because shared team goals should emerge from individual goals (Banks 1996; Senge 1990), team members propose clear and challenging team goals based on the disclosed individual goals. In this way, team members can align and reconcile the possibly incompatible individual and team goals (Culbert and McDonough 1980). *Third*, after exchanging and discussing the proposed team goals, team members rank these team goals. Then, they choose the top ranked goals as the final shared team goals. This way of ranking and choosing the proposed team goals is called the pooled coordination of a team (Turoff et al. 1993).

Shared team goals can motivate a team (Locke and Latham 1990) to conduct a dialogue. Hence, this stage of generating shared team goals is called *the corner-stone* of a dialogue (see box (2) of Figure 1).

(3) The Infinite Container stage, the core of this theoretical framework, is a dialogue session specifically guided by the MIT dialogue procedure. MIT dialogue sessions were all conducted manually without the support of information technology (IT) (Schein 1993). This study, however, intends to embed the dialogue procedure into a GSS for *supporting distributed team-building*. Thus, the dialogue in this paper is termed as a GSS dialogue. For this purpose, the MIT dialogue procedure is slightly modified below:

First, team members are asked to think of their past team working experiences in terms of good team communications. Because the GSS simultaneity (Bostrom and Anson 1992) provides an open, equal, and parallel electronic communication channel to every member, thus rendering *a better sense of equality* in a GSS dialogue than in a manual dialogue. *Second*, members *parallelly* disclose and share those past team working experiences, and identify the related characteristics of the experiences in terms of good communication protocols, team roles (Nath and Lederer 1996; Turoff et al. 1993), and the four basic elements of a team (Borgatta and Borgatta 1992). Because this step allows members to disclose their own experiences and thinking about good team communications (i.e., *turning a mirror inward*, as suggested by the mental models discipline), team members can *start to know themselves and others* (see box (3) of Figure 1).

Third, given the shared team goals, members *parallelly* exchange and clarify their reactions to the above identified characteristics of good team communications. More specifically, members *inquiry* about others' identified characteristics, and clarify and disclose (*turning mirror inward*) the justifications (e.g., purposes, values, and preferences) of their own identified characteristics. According to the mental models discipline (Senge 1990), this step can result in surfacing and understanding each other's mental models, so that members can *know themselves and others better*.

Fourth, members are not allowed to criticize others' identified characteristics because of the requirement of the container and suspension of a dialogue. A dialogue facilitator would intervene (e.g., through e-mail), when necessary, to clarify or elucidate, using concepts and data that illustrate the problems of communication. *Fifth*, the dialogue will be closed when no further exchange and clarification from team members is needed.

With the GSS structures of anonymity, simultaneity, and electronic recording (Bostrom and Anson 1992), the container of a GSS dialogue can virtually "contain" unlimited controversial ideas. Hence, the container in a GSS dialogue is termed as the "Infinite Container" (see box (3) of Figure 1).

(4) At the Laser Generator stage, the powerful outcomes of a dialogue, termed as the laser (Bohm 1990), can be generated. More specifically, *given the shared team goals*, team members rank the characteristics discussed at stage (3) -- another round of pooled coordination activity (Turoff et al. 1993). *Team members need to determine (by ranking) what characteristics of team communications are most important to the attainment of the shared team goals.* This can result in specific shared team rules that will guide team's future communications, interactions, and activities.

In general, two types of dialogue outcomes can be generated. The first type can be termed as *the shared ground rules of a team* (i.e., *the tangible shared team meanings*), which may include the contents of specifying the four basic team elements -- team structure (e.g., leadership and role differentiation), team identity (e.g., team goals), team interdependence (e.g., team coordination), and team history (e.g., the frequency of team meeting). The second type can be a kind of *shared team conventions and norms* (i.e., *the intangible shared team meanings*), which may guide team interactions consciously (e.g., respecting differences in team interactions), and most of the time, maybe unconsciously (e.g., a team norm may exist in some cultures where the ideas given by senior or high rank people will automatically and unconsciously be given higher weights in team interactions). The generation of both tangible and intangible *shared team meanings* indicates that team members reach a higher level of team consciousness, so that the team can really think together in the future (Schein 1993).

(5) The above two type of dialogue outcomes can be measured using the instrument proposed by Larson and LaFasto (1989) to check whether a team reaches a satisfactory level of team-building. If not, the team can repeat the dialogue procedure until the satisfactory level is reached.

In summary, because this dialogue theory-based team-building framework can support the generation of shared team meanings (i.e., the common basis of a team), a GSS embedded with this framework may *enhance distributed team-building*.

4. Research Propositions

4.1. GSS Dialogue

The positive research results reported by the MIT Dialogue Project (e.g., Isaacs 1993; Schein 1993) support the effort of embedding the dialogue theory-based team-building framework into a GSS. The MIT

research has been conducted in a manual face-to-face (FtF) setting. With a GSS, the power of a dialogue is likely to be better realized; this understanding leads to the research propositions outlined in section 4.2. In the following, DT-GSS is used to denote the GSS embedded with the Dialogue Theory-based team-building framework.

4.2. Research Propositions

Team-building can be measured in terms of team trust (Larson and LaFasto 1989; Schein 1993), cohesion (Seashore 1954), and conflict (Chidambaram, Bostrom and Wynne 1991). In general, a well built team should perform better. The dependent variables of decision quality and satisfaction are commonly used to measure the outcome of team work (e.g., Benbasat and Lim 1993; Dennis, Haley and Vandenberg 1996). Hence, these five variables are adopted to examine whether the DT-GSS could enhance distributed team-building as well as the performance of distributed team work.

The **team trust** can only be established when every member in a team *believes* that the team will be fairly consistent and mature in its approach to deal with problems, and that every member will be valued and treated with respect (Larson and LaFasto 1989).

The DT-GSS can enhance team trust in two aspects. First, according to the framework of Figure 1, the shared team goals are well aligned with individual goals. The shared team goals can clearly show to team members that their individual interests and needs depend on the attainment of team goals (Culbert and McDonough 1980; Mackie and Goethals 1987). Team members are thus *motivated* to understand each other, *trust* each other, and collaborate with each other, in order to attain the shared team goals.

Second, the two guidelines for establishing team trust, i.e., that the team must be fairly consistent and mature in its approach to deal with problems and that every member must be valued and treated with respect (Larson and LaFasto 1989), can be included as the contents of shared team meanings (e.g., as the shared team ground rules in stage (4) of Figure 1). Because the shared team meanings (including the two guidelines) are generated and commonly accepted by team members themselves in a GSS dialogue, team members are more likely to *believe in and follow* these two guidelines (and other shared team meanings). Hence, the shared team meanings enhanced by DT-GSS can increase team trust and hold people together (Bohm 1990).

Proposition #1 The DT-GSS will enhance team trust in a distributed team.

The **team cohesion** refers to the attraction of a team and the closeness that team members feel to each other (Seashore 1954). Team goals consist of achievement and maintenance goals. The *team maintenance goals* are generally related to the "climate" of a team and refer to the kind of relationships among team members. The most common team maintenance goal is to keep a team together (Barker et al. 1991). Because team's coordinative activities are for the purpose of attaining team goals (Larson and LaFasto 1989), the presence of shared team maintenance goals can help to bind a team together and give the team a basic level of cohesiveness (Barker et al. 1991; Johnson and Johnson 1987; Schultz 1992).

Further, shared team meanings (e.g., shared team goals) generated in a GSS dialogue can enhance the sense of "we-ness" among team members (Lewin 1951; Owen 1985; Schultz 1992). As a result, team members would feel closer to each other as well as to the team.

Proposition #2 The DT-GSS will enhance team cohesion in a distributed team.

The **team conflict** here refers to the personally oriented conflict, which militates against team consensus and leads to a general dissatisfaction among team members (Gouran 1992). The shared team meanings (e.g., shared team goals) generated in a GSS dialogue can enhance the sense of "we-ness" (e.g., Schultz 1992) and thus minimize the chances of conflict (Poole, Seibold and McPhee 1985). Further, literature review shows that team cohesion and conflict have a reciprocal causal relationship (e.g., Chidambaram, Bostrom and Wynne 1991; Shaw 1981; Watson 1987). Since the DT-GSS may enhance team cohesion (the proposition #1), it could reduce team conflict.

Proposition #3 The DT-GSS will reduce team conflict in a distributed team.

GSS research literature indicates that although GSS can generally increase decision quality, but fails to increase or sometimes even decreases decision

satisfaction and decision process satisfaction (e.g., Benbasat and Lim 1993; Dennis, Haley and Vandenberg 1996). This has become one of the major concerns in GSS research (e.g., McGrath and Hollingshead 1994). The DT-GSS may be able to enhance the decision satisfaction as well as the decision process satisfaction.

In team's decision making process, the DT-GSS may increase team cohesion (proposition #2) and decrease team conflict (proposition #3). Hence, team members in such a cohesive team with less conflict should feel more comfortable to work together on decision-makings. As a result, team members may be more satisfied with such a cohesive decision-making process.

Proposition #4 The DT-GSS will increase decision process satisfaction in a distributed team.

From a goal perspective, the final decision of a team is generally for attaining team goals. In a GSS dialogue, shared team goals are generated based on individual goals (Senge 1990); accordingly, the isomorphism between individual and team goals can be fostered. Thus, the final decision for attaining the shared team goals may be perceived by team members as the one of simultaneously attaining their own individual goals (Mackie and Goethals 1987). Consequently, team members are likely to be more satisfied with the final team decision.

Proposition #5 The DT-GSS will increase decision satisfaction in a distributed team.

Research literature shows that team cohesion and team performance are often co-related (Littlepage, Cowart and Kerr 1989; Shaw 1981); this relationship is also shown in a recent meta-analysis (Evans and Dion 1991). A highly cohesive team would be productive while team value is placed on accomplishing team task (e.g., Goodman, Ravlin and Schminke 1987; Schultz 1992; Shaw 1983). The team value of accomplishing team task can be reflected in the form of team achievement goals in a GSS dialogue. As a result, a more cohesive team supported by the DT-GSS (proposition #2) may lead to better team performance, reflected as decision quality in the context of this paper.

Proposition #6 The DT-GSS will increase decision quality in a distributed team.

5. Discussion and Implications

This paper proposes a dialogue theory-based team-building framework. Based on this framework, a set of testable propositions are formulated. Some important implications of the proposed framework are discussed below:

Implications for GSS Users

The framework in Figure 1 can be used in flexible ways. For example, it can be used in a way to address *one general team issue* such as enhancing distributed team-building; it can also be used to address *one specific team issue* such as role clarification, or interpersonal relationship. Further, the GSS dialogue can be repeated until a satisfactory level of team building is reached. From this viewpoint, the framework might be regarded as a kind of production line which could help to produce and perhaps reproduce a special type of quality product -- a cohesive and effective team that reaches a high level of shared team consciousness and can really think together (Isaacs 1993). Hence, dialogue (or GSS dialogue) can be considered as the root for an effective team (Schein 1993).

For a new distributed team, the framework could be even more important. The initial meetings of a new team are so unique and important that they set the tone for the team's future actions (Gersick 1989). A new team at this early stage could be most vulnerable. Team members are eager to know and familiarize with each other; but *due to lack of shared meanings and values*, they may not know how to start and how to co-orientate further from the start. They have various levels of expectations towards others and the team, but *due to the least available structures* as the necessary guidance of interactions at this stage, they may not know how to adjust themselves to fit the practical situations. All these result in low member participation, high anxieties, and much dependence on team leaders (Bales and Strodbeck 1951; Mann, Gibbard and Hartman 1967), which can hinder effective team-building.

The dialogue theory-based framework can help to generate the necessary *shared meanings, values, and team structures* to guide the processes of initial team co-orientations and interactions. Further, team members can interact with each other with less fears about social offenses or negative feedback from others (with the container and suspension of dialogue). As a result, a new team can be better built up and more

likely to function as a cohesive and effective team in the future (Gersick 1989).

Implications for GSS Researchers

First, future research on supporting distributed team-building can directly test the dialogue theory-based team-building framework. Laboratory research can be conducted to study separately the impact of each component of the framework on distributed team-building.

Second, review on GSS literature indicates that most prior GSS research focuses on supporting task-oriented team work and largely ignores the *socio-emotional activities* of a team. However, research has reported that even in task-oriented computer system design meetings, only 40% of the meeting time was spent in task-focused discussion (Olson et al. 1992). Task and socio-emotional activities co-exist in and are equally important to a team (e.g., Bales and Strodbeck 1951; Blake and Mouton 1978; Cartwright and Zander 1968). More research is therefore needed to study how to support socio-emotional activities using GSS.

The DT-GSS provides an electronic and virtual gathering place (as well as the structures) for team members to proceed with social interactions, where team members can disclose and exchange personal experiences, preferences, values, likes/dislikes, and internal needs/goals. These social interactions can help team members to establish a good interpersonal relationship with each other, thus supporting the socio-emotional activities of a team. Perhaps more importantly, the DT-GSS provides the dialogue structures of container and suspension, so that team members feel free to be open and share personal and controversial information (Olive and Langford 1987; Schein 1993). This kind of socialization of sharing personal information is important to building trust in a team, which in turn can foster team spirit (Conlin 1989; Hare 1992). Future research should specifically study the impact of the DT-GSS on the socio-emotional activities of a team, and the effect of the container and suspension of dialogue on team trust and spirit.

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