Social loafing in technology groups

Technology

Technology-supported Groups Both technology supported and virtual groups are becoming common components within the educational and corporate structure. There have been few studies conducted about social loafing within the online learning environment. The study conducted within this research investigated social loafing in technology supported groups.

The article describes social loafing as " the tendency of members to do less than their potential" (Academician & Tune, 2005). There are two theoretical emissions explored within the conducted study, the Social Impact Theory (SIT) explains the two as, " The dilution effect (where an individual feels submerged in the group) and the immediacy gap (where an individual feels isolated from the group)" (Academician & Tune, 2005). The social impact theory is a key component to understanding social loafing in technology-supported groups.

The social impact theory (LATA, 1981) claims that all forms of social influence, whatever the specific social process, will be proportional to a multiplicative function of the strength, immediacy, and number of people who are the sources of influence, and inversely proportional to the strength, immediacy, and number of people being influenced. The two principles of the theory, dilution effect and immediacy gap, help support the conclusions as well as the understanding of the study results.

Kiddies and Bennett (1993) explains that the motivational forces behind social loafing is based on the long time argument that the greater the sources and targets of social impact within a group, the less contributions individual members make towards group effort. With the dilution effect,

individuals may feel that their efforts in the group are too small to make a difference when there are large numbers of other members in the group who can contribute " better". This effect causes individuals to engage in dysfunctional processes and withdraw from the group (Frank & Anderson, 1971).

Immediacy gap refers to the immediacy of sources and the targets of social impact is based on the group members' interaction with the environmental conditions. Previous research done has shown that immediacy gap exists most noticeably in settings where individuals' contributions to the group are not easily identifiable (Brewer 1995, Salesmen 1998) and where social comparisons are difficult to make (Williams & Karma, The sample population chosen for this research design included two 1991). Hundred and forty undergraduate business students.

The students were randomly assigned to forty groups, twenty consisted of four members while the other twenty consisted of eight members. There were three technology tools used and taught to participants in preparation for the study. The three tools (Electronic Brainstorming/ EBBS, Topic Commenter, and Electronic Voting) that are part of the Gorgeousness groupware suite were used in " generating, organizing, and evaluating ideas"(Academician & Tune, 2005). The researchers then introduced the task to each group.

The task given had no right or wrong answers. The groups' task was to picture themselves as a board of directors brainstorming to improve the image of their " winery business. " In order to complete the task given, the

groups were placed in two different settings. In the dispersed groups, members had no face to face interaction ND were assigned to their own rooms in a building, which were equipped with networked computers. Members of the collocated groups met together in a networked conference room of a large university.

The members of the collocated groups sat in a " U" shaped table facing each other, with a screen to display each of the participant's virtual input. Both groups were facilitated by trained staff in order to ensure the rules of the study were followed. The first step for both groups was generating ideas (Electronic Brainstorming). Brainstorming was done individually and compiled into a document that members could see. The second step for both groups was discussion, which included clarification, commenting on, and questioning of ideas as well as the editing, merging, deleting, and grouping of ideas.

In the collocated groups, both verbal and electronic discussion was allowed. In the dispersed groups, only electronic discussion was allowed. The third and final step for both groups was evaluation, the rating of each idea on a scale of one to ten. In both the collocated and dispersed groups, electronic voting was done. The results of the study done concluded that, " small groups, signifying a small dilution effect, had increased individual contributions and better group outcomes compared to their larger counterparts" (Academician & Tune, 2005).

The results concerning the immediacy gap was mixed, there was visibly more member contribution in collocated groups, but there was no compelling

differences in the quality of the decisions made. Despite limitations from the study done in both groups, another conclusion researchers came to was that group size played a significant role in results. Group size impacted the group outcomes as well as group decision making and individual contributions. Large groups have generally elicited lower individual contributions and had poorer outcomes compared to small groups" (Academician & Tune, 2005).

Another conclusion made based off of the study was that, individuals in collocated groups contributed more Just by the mere presence of others compared to the dispersed group, even though same technology was used but from separated locations. In collocated groups, there was more group engagement in social comparison to dispersed groups. Peer performance, especially within a face to face/ in person interaction, seemed to be the main motivation in the generation of embers' ideas. Collocation increased social pressure as well as productivity in group members. Individual performance in groups is influenced by a combination of social demands and task demands" (Hiroshima & Pace, 1983). There were both strengths and weaknesses in the conducted study. Strengths of the study was that participants were randomized in order to prevent social alliances affecting group performance. Another strength was that procedures were uniformed between both dispersed and collocated groups. A weakness of the study was that sample sizes could have been increased in ratio within the groups. Instead of only two group sizes, there could have been more of a range.

For example, groups of four, eight, twelve, etc. In conclusion, although dispersed groups showed less productivity than the collocated groups, group decisions were comparable. Smaller collocated groups showed more

individual input and group output. Given the range of available collaborative technology, there should be considerations of organization when people should be working together or apart. As we are progressing in technology, technology supported groups are inevitable and are increasingly being explored. References Brewer N. 1995).