Group Decision Support System Anonymity Level Effects Upon Decision Quality

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There has been little consensus regarding the group decision support treatment on decision quality. Dennis and Gallupe provide a sampling of the 'rather mixed set' of early findings: Ruble and Gallupe find no effect, while Steeb and Johnson, Turoff and Hiltz, Lewis and Beauclair find positive effect. George, Easton, Nunamaker and Northcraft also note the divergence. More current research performs "drill-down" research to examine outcomes controlling for various task, group, context, and technology variables as suggested by Nunamaker, Dennis, Valacich, Vogel and George. The perspective is termed "the decision school of thought" by DeSanctis and Poole. A typical example is found in Anson, Bostrom, and Wynne that compares various outcomes over a facilitator versus GSS 2 x 2 factorial design. Of special interest, with respect to this research, in this vein is the findings of Dennis et. al., that under no main GSS effect, GSS has significant positive effect on decision quality under uneven information dissemination and large negative effect under even information dissemination.

Anonymity is the most studied process variable, possibly since its positive effect is seductively intuitive. Rao and Jarvenpaa review theory that supports the view that anonymity results in positive effect on decision quality. Previous work by Maass and Clark and Tanford and Penrod finds that majority opinion typically prevails group decisions. A series of experiments by Nemeth finds that minority influence positively contributes by forcing a reexamination of alternatives; Kahnemann believes that minority induced conflict results in higher level of cognitive activity. This conflict could be interpreted as similar in nature to the conflict between task and group requirements discussed by DeSanctis and Gallupe. In contrast to this theory lie experimental results. Only one of five Arizona experiments finds positive outcome under anonymity, and other studies confirm, though it is found that participants may perceive significance.

Valacich, Dennis, and Nunamaker believe that it may be more appropriate to think of anonymity as a continuous, rather than discrete, variable. This suggestion implies an as yet unanswered question "is there an anonymity <u>level</u> effect?"

At this point, the paper has, in full form, a completed literature review, hypothesis formation, list, a planned methodology and approximately 25 referenced sources.