Introduction

The theory of social facilitation suggests that the presence of others has a positive influence on a person's performance (Parks & Sanna, 1999). Collaborative research supports the suggestion that group work can improve problem-solving skills, assist in a higher-level learning, and critical thinking (Hiltz, Coppola, Rotter and Turoff, 1999). However, research also suggests that some group members may engage in negative behavior such as social loafing. Social loafing is the tendency to reduce individual effort when working in groups compared to the individual effort expended when working alone (Williams & Karau, 1991). The literature on social loafing identifies several antecedents as contributing to the development of social loafing among group members. These antecedents include task visibility, task interdependence, cohesiveness, distributive justice, procedural justice, group size, and dominance. In addition to these antecedents, research has identified several individual social factors that are commonly associated with, contribute to, and at times are used interchangeably with the term social loafing. These factors include shirking, lurking, dominance, aggression, and free riding.

Research on the phenomenon of social loafing and free riding is extensive in the laboratory, face-to-face classroom, and organizational setting. However, research regarding the existence of social loafing phenomenon in the online learning environment is sparse. Distance learning issues such as geographical separation, lack of visual cues, work schedules, and time zone differences either may exacerbate or could possibly alleviate perceptions of social loafing and free riding in online learning groups. This study seeks to increase the understanding of social loafing phenomenon in the online learning group by determining whether the perception of social loafing exists in the minds of students within the online learning environment.

Social Loafing Research: This Study

Personal Degree of Social Loafing

Perceived social loafing refers to the extent that group members believe that other group members are engaging in social loafing (Comer, 1995). Group members will base their actions on the perceived actions of their fellow group members whether or not they are actually occurring (Mulvey & Klein, 1998). The mere perception, whether accurate or not, may result in negative effects on group member’s motivation and result in social loafing (Mulvey & Klein, 1998). Therefore,

Hypothesis 1: The perception of social loafing exists within online learning groups.
Individual Task Visibility

Kidwell and Bennett (1993) defined *task visibility* as the belief that a supervisor is observing one’s individual efforts. Decreased individual task visibility may increase the occurrence of social loafing among group members. Individuals perceive that their work is not important or critical for group success. If members develop the perception that their work is not critical for group success, they may withhold individual effort from the group thereby reducing group productivity. Therefore,

Hypothesis 2: There is a correlation between task visibility and perceived social loafing in online learning groups.

Individual Contribution

Karau and Williams (1993) suggest that individuals will be unlikely to exert extraordinary effort unless they view their individual task as meaningful. Individuals will withhold effort, achieve rewards, and calculate greater benefits as long as they perceive that doing so will not affect their outcomes (Liden et al, 2004). Therefore,

Hypothesis 3: There is a negative correlation between individual contribution and self-reported social loafing in online learning groups.

Distributive Justice

*Distributive justice* is how an individual perceives the distribution of rewards or compensation among group members. The perceived fairness of the procedures and policies associated with distributed justice is termed *procedural justice*. Individual task achievement, when participating in group activities, can be impacted by a student’s perception of the procedural and distributive justice established by administration or an instructor. Kidwell and Bennett (1993) proposed that an individual might alter their individual work effort if there is a perception of unfair distribution of rewards. Research indicates there is a significant correlation between procedural justice and social loafing; and individual’s perception of the fairness in distribution procedures may influence the individual’s effort on group projects (Liden et al, 2004; Karau and Williams, 1993). Therefore,

Hypothesis 4: There is negative correlation between positive perceptions of distributive justice and social loafing in online learning groups.

Dominance and Aggression

There are times, due to individual personalities or a given situation, a student may demonstrate dominant or aggressive behavior in an online course. Dominance is an individual’s attempt to establish rules, control, or otherwise establish authority over other group members. Aggression is overt or suppressed hostility toward other group members. The impact of this behavior on more reserved members can be a decrease in participation due to a feeling of intimidation (Michaelsen, Fink, & Knight, 1997). Palloff and Pratt (2003) suggest that flaming, rude, angry personal attacks on a fellow classmate can have a negative impact on group dynamics in that the students report feeling unsafe, insecure, and inhibited in expressing their personal feelings and beliefs. Therefore,

Hypothesis 5: There is a positive correlation between self-reported social loafing and dominance in online learning groups.
Method

Participants

The participants were 227 (174 male, 53 female, 3 did not indicate gender) undergraduate and graduate students enrolled in online courses at either a major university in the southeast United States or the Naval War College. Participant age ranged between 20 and over 40 years of age (20 to 30 = 44, 30 to 40 = 74, over 40 = 106, 3 did not report age).

Procedure

All participants were enrolled in an online course where they were working on a group project. Group projects required for the online courses served as the task. Groups were naturally occurring and group size ranged from two to nine members. Each group had complete autonomy regarding individual and group goals, team member assignments, and group roles. All projects were similar in form but different in content. Several of the courses required more than one group project within the course but each of the participants completed a survey upon completion of their most recent group project. At the conclusion of the group project each group member was asked to complete a web-based survey to report their perceptions of: (a) degree to which their fellow group members participated in social loafing, (b) personal degree of social loafing, (c) individual task visibility, (d) individual contribution, (e) distributive justice, (f) sucker effect, and (g) group member dominance.

The web-based survey consisted of 43 items and allowed for students to start and stop the survey at will while storing the results. Students had the option to complete the survey at more than one opportunity to encourage a higher completion rate. In addition, scheduled reminders were sent to participants to complete the survey prior to beginning their next group projects. If participants had completed the survey at a prior time and attempted to complete a new survey, they would receive an electronic notification that they had previously completed the survey and the survey could not be completed a second time.

Results

Of the 227 participants, 35.7% indicated the perception of other group members social loafing. The participants enrolled in a public university self-reported 16% social loafing. Participants enrolled in the Naval War College only self-reported 3% social loafing behavior. Based on the self-reported social loafing behavior, there is evidence to support Hypothesis 1.

No evidence was found to support Hypothesis 2. However, as indicated in Table 1, a negative correlation (r = -.168, N = 180, p < .05) was found between task visibility and sucker effect. In addition, a positive correlation (r = .438, N = 180, p < .01) was found between task visibility and distributive justice. This suggests that as task visibility increases, avoidance of playing the sucker role will decrease. It also suggests that as task visibility increases, so does the perception of the fair and equitable distribution of awards.

Evidence was found to support Hypothesis 3. Table 1 indicates a negative correlation (r = -.271, N = 180, p < .01) between contribution and self-reported social loafing. In addition, there is a negative correlation (r = -.238, N = 180, p < .01) between contribution and dominance.

A negative correlation (r = -.265, N = 180, p < .01) is demonstrated between distributive justice and self-reported social loafing. This correlation suggests that as positive perceptions of distributive justice increase, social loafing decreases. These results provide support for Hypothesis 4.
Table 1. Correlations

<table>
<thead>
<tr>
<th></th>
<th>Task Visibility</th>
<th>Contribution</th>
<th>Social Loafing Others</th>
<th>Social Loafing Self</th>
<th>Sucker Effect</th>
<th>Dominance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task Visibility</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Contributions</td>
<td>.086</td>
<td>.122</td>
<td>-.036</td>
<td>-.271**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Loafing Others</td>
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<td>.094</td>
<td>.036</td>
<td>-.168*</td>
<td>.780**</td>
<td></td>
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<td>Social Loafing Self</td>
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<td>.040</td>
<td>.517**</td>
<td>.625**</td>
<td></td>
<td>-.135</td>
</tr>
<tr>
<td>Sucker Effect</td>
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<td>.238**</td>
<td>-.265**</td>
<td>-.275**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominance</td>
<td>-.091</td>
<td>-.033</td>
<td>-.137</td>
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<tr>
<td>Distributive Justice</td>
<td>.438**</td>
<td>.103</td>
<td>-.275**</td>
<td>-.135</td>
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<td></td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level
** Correlation is significant at the 0.01 level
N=180

Table 1 indicates a significant correlation ($r = .780$, $N = 180$, $p < .01$) between sucker effect and social loafing. These data suggest that as the perception of social loafing increases, so does the tendency of individuals to avoid playing the sucker role by reducing their individual effort. Additionally, Table 1 indicates a negative correlation ($r = -.168$, $N = 180$, $p < .05$) between sucker effect and task visibility. This indicates that as task visibility increases, instances of sucker role avoidance decreases.

Table 1 indicates a positive correlation ($r = .517$, $N = 180$, $p < .01$) between self-reported social loafing and dominance. This suggests that social loafing increases with the perception of group member’s display of dominant behaviors within the group. These data support Hypothesis 5. A positive correlation was also found between dominance and sucker effect ($r = .625$, $N = 180$, $p < .01$). This suggests that as the perception of dominance increases within the group, members will increase their efforts to avoid playing the sucker role by reducing or withholding effort.

Conclusion

This research study provides evidence to suggest that social loafing is prevalent in the online learning classroom. In addition, problems similar to those associated with face-to-face classroom social loafing are indicated. Since the distance learning environment also encompasses other potential problems for group activities (i.e., geographical distance, time zones, work schedules), social loafing issues are reducing the effectiveness of group work in the online classroom. Therefore, it is incumbent upon distance learning researchers to further study the phenomenon of social loafing in distance learning environments and attempt to uncover ways in which the phenomenon of social loafing can be either mitigated or eliminated.

References


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**Biographical Sketches**

**Sherry L. Piezon** is an instructor pilot for the US Army IERW program and a fourth year doctoral student in Information Studies at Florida State University. She has over 19 years experience as an instructor, trainer, and facilitator. Her online experience spans 8 years in corporate, military, and academic settings. She has served as a military consultant and trainer with the U.S. Air Force, major airlines, and corporate flight departments. She has also served as a corporate Program Manager for synchronous online learning that included program initiation, implementation, and administration of courses worldwide.

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**William D. Ferree** is the Program Manager for Web-Enabled Programs in the College of Distance Education at the Naval War College. He has over 30 years of experience in face-to-face classrooms and has spent the last ten year in online instruction and course development. He is responsible for the web course offerings for the master’s level courses of the Naval War College. Students of all military services, DOD, State, and DHS take web courses offered by the college. Dr. Ferree is an accomplished web course designer; in 2002, one of his web courses received the Association for Educational Communications and Technology (AECT) “Crystal Award” for the most innovation and outstanding multimedia-based instruction in distance education in the nation.

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