

**LESSONS FROM THE BEST AND
WORST STUDENT TEAM
EXPERIENCES: HOW A TEACHER
CAN MAKE THE DIFFERENCE**

Rebecca Vandiver

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GOAL

- * *“To provide teachers with actionable, empirically supported recommendations for effectively creating and administering student teams” [1]*

METHOD OF ASSIGNMENT TO TEAMS

Three approaches to assigning students to teams have been explored in the literature [2]:

- *Self-selection*: higher initial cohesion [3], more ownership of group problems [4], overly homogenous [5], inadequate skill set [4]
- *Random assignment*: unbalanced in terms of skills, diversity, and general ability
- *Teacher assignment*: diffuse, difficult to implement

Hypothesis 1: Best teams will include more self-selected teams than will worst teams.

TEAM LONGEVITY

- Most agree that teams generally progress with time
- Research and development teams: project performance peaked in the second to fourth year of a team and dropped thereafter [6]

Hypothesis 2: Best teams will have worked together longer on average than will worst teams.

WEIGHT OF GRADE GIVEN TO TEAMWORK

- Performance is influenced by reward [7], rewards for students come primarily in the form of grades – therefore, expect students to perform better on elements of course that have greater impact on final course grade
- If percentage of course grade associated with teamwork is quite low, students may neglect their teamwork altogether [8]

Hypothesis 3: Best teams will have a higher percentage of the course grade associated with teamwork than will worst teams.

PEER EVALUATIONS

- Social loafing: Individuals tend to reduce their effort when working in a team [9]

Will peer evaluations reduce social loafing?

- Individual performance may improve when subjects believe their own contribution will be identifiable

Hypothesis 4: A larger percentage of best teams will report using traditional (confidential, end-of-the-term-only) peer evaluations than will worst teams.

TEAM SIZE

Clear consensus in the literature about team size – *keep teams as small as possible* [10]

- Team performance may decline because of difficulty in coordinating efforts of larger number of people
- Individual effort may decline because individuals feel their contributions are not identifiable
- Dissension among team members increases with team size [11]

Hypothesis 5: The average team size on best teams will be smaller than the average team size on worst teams.

TEAM INSTRUCTIONS

- Having a clear team vision or at least a clear understanding of team objectives is important to team success [12],[13]
- When team objectives are unclear, team members may argue over what the team should be doing

Hypothesis 6a: Best teams will be more likely to say the instructor gave them sufficient instructions on outcomes (what the team was to submit or present) than will worst teams.

Hypothesis 6b: Best teams will be more likely to say the instructor gave them sufficient instructions on process (how the team should perform its tasks) will worst teams.

METHOD

- Survey given to first-year and second-year MBA students
- 1st section: questions used to obtain descriptive statistics
- 2nd section: questions concerning team context, team composition, team process, and team outcomes
 - Students asked to respond to each question in each of two contexts: best team experience and worst team experience
- Examine how contextual variables differ across the best and worst teams
- Test hypotheses using paired *t* tests

RESULTS

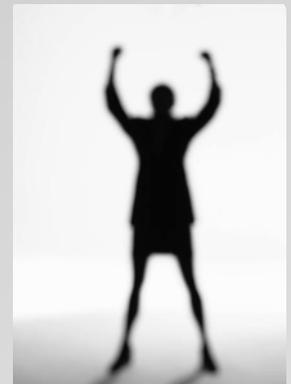
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**Positively
linked to
best team
experiences**



RESULTS

Hypothesis 3: Best teams will have a higher percentage of the course grade associated with teamwork than will worst teams.

Hypothesis 5: The average team size on best teams will be smaller than the average team size on worst teams.

**No
relationship
with
best/worst
team
experiences**

RESULTS

Hypothesis 4: A larger percentage of best teams will report using traditional (confidential, end-of-the-term-only) peer evaluations than will worst teams.

Negatively associated with best teams

DISCUSSION AND RECOMENDATIONS

- 1) Provide teams with adequate descriptions of outcomes and processes.
- 2) Maximize team longevity.
- 3) Once students know each other, let them have a say in team assignments.
- 4) Be wary of the use of traditional peer evaluations.
- 5) Set team size by pedagogical objectives.

REFERENCES

- [1] Bacon, D. R., Stewart, K. A., & Silver, W.A. (1999). Lessons from the best and worst student team experiences: How a teacher can make the difference. *Journal of Management Education*, 23(5), 467-488.
- [2] Decker, R. (1995), Management team formation for large scale simulations. In J.D. Overby & A. L. Patz (Eds.),
- [3] Strong, J. T., & Anderson, R. E. (1990, Summer). Free-riding in group projects: Control mechanisms and preliminary data. *Journal of Marketing Education*, 12, 61-67.
- [4] Mello, J. A. (1993). Improving individual member accountability in small work group settings. *Journal of Management Education*, 17(2), 253-259.
- [5] Jalajas, D. S., & Sutton, R. I. (1984-1985). Feuds in student groups, coping with whiners, martyrs, saboteurs, bullies, and deadbeats. *Organizational Behavior Teaching Review*. 9(4), 217-227
- [6] Katz, R. (1982). The effects of group longevity on project communication and performance. *Administrative Science Quarterly*, 27(1), 81-104.
- [7] Steers, R. M., & Porter, L. W. (1991). *Motivation and work behavior* (5th ed.). New York: McGraw-Hill.
- [8] LeRosen, R. G. (1976, April). Group projects, peer rating scales: Management education tools. *Journal of Business Education*, 317-318.
- [9] Ingham, A. G., Levinger, G., Graves, J., & Peckham, V. (1974). The Ringelmann effect: Studies of group size and group performance. *Journal of Experimental Social Psychology*, 10, 371-384.
- [10] Comer, D. R. (1995). A model of social loafing in real work groups. *Human Relations*, 48(6), 647-667.
- [11] Gentry, J. W. (1980). Group size and attitudes toward the simulation experience. *Simulation & Games*, 11i(4), 451-459.
- [12] Burningham, C., & West, M. A. (1995). Individual, climate, and group interaction processes as predictors of work team innovation. *Small Group Research*, 26(1), 106-117.
- [13] Fowler. A. (1995). How to build effective teams. *People Management*, 1(4), 40-41.