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STUDENT'S PERCEPTIONS OF MANAGERIAL FUNCTIONS AFTER EXPOSURE TO EITHER THE CASE METHOD OR A SIMULATION

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ABSTRACT

This study represents an attempt to measure the effects of participating in a business simulation on the attitudes of the participants relative to a number of managerial functions. Comparisons were made between two groups of student subjects, those subjected to the simulation in two sections of the senior business policy course and those with the case method instead. Findings for these two groups were that the simulation group found organizing definitely more important than any other single activity. The other variables considered failed to show any significant difference between the groups.

INTRODUCTION

Users of simulations and other experiential learning techniques do so under the assumptions that they contribute more to students' learning than alternative teaching methods. Researchers have continually tried to find measurable differences either justifying the use of experiential methods or proving they don't work." [2] This study represents another step in the process of determining the applicability of simulations in the business policy course.

OBJECTIVE

The primary objective of the study is to measure the effect of participation in a comprehensive business simulation on attitudes toward the relative importance of a variety of management functions. As an exploratory study, other considerations include the development of measurement instruments and an appropriate research design.

PROCEDURE

Because of a sudden increase in demand for the capstone business policy course, spring semester, 1979, use of a general business simulation for all students in the course was deemed unfeasible. Therefore, students in two sections were offered the alternatives of participating in the simulation or opting for case study. This part of the course would constitute about 60% of class time and about 75% of the final grade. The balance of the course is devoted to lecture and current readings.

The classes divided themselves precisely in half with 34 students in each group-case and simulation. After the semester's work was completed, both groups were given the questionnaire contained in Appendix A to measure their perceptions of the importance of a number of business topics.

Students were instructed to circle the point on the 61-point scale that reflected their rating of the importance of that particular business factor ranging from extremely unimportant to extremely important.

FINDINGS

As the table below shows, only one variable (organizing), showed a statistically significant difference between the two groups. One other, data processing, was also significant at the .1 level. The higher the mean value the more important that factor is considered by the respondent. The range of the scale is from 0 to 61, with 0 as extremely unimportant and 61 as extremely important.

TABLE 1
MEAN RATINGS OF STUDENT'S PERCEPTIONS
OF VARIOUS BUSINESS VARIABLES

<u>Variable</u>	<u>Case Group Mean</u>	<u>Simulation</u>	<u>T-Value</u>	<u>2-Tailed Probability</u>
Market Research	50.09	48.26	.65	.56
Sales Forecasting	49.56	47.18	.93	.36
Production Scheduling	51.00	48.18	1.27	.21
Labor Relations	46.53	49.06	-.90	.37
Financial Planning	51.18	51.29	-.04	.97
Advertising	42.97	45.56	-1.00	.32
Cost Accounting	44.85	43.97	.27	.79
Pricing	46.24	48.88	-1.07	.29
Strategy Formulation	53.06	51.15	.75	.45
Policy Setting	48.62	47.97	.23	.82
Corporate Planning	52.11	50.47	.61	.54
Managerial Accounting	43.41	41.74	.62	.54
Data Processing	44.24	39.35	1.79	.08
Business Law	44.00	40.32	1.16	.25
Ethics	40.85	39.06	.47	.64
Organizing	49.62	55.15	-2.48	.02
Operation Research	42.91	41.18	.63	.53
Organization Structure	43.03	43.53	-.17	.87

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APPENDIX A

DISCUSSION

The situation [1] used on the simulation group is heavily product-ton oriented and may partially explain the failure of the marketing variables to rate higher with the simulation group. On the other hand, the case group discussed a variety of different cases, most of which demonstrated the need to do effective corporate planning in all of the functional areas.

The foundry simulation was designed to be too complex for a single individual to handle alone. Participants were forced to work together effectively if they were to survive. This was clearly shown by the response to the questionnaire question on organizing ($t = -2.48, p < .02$)

This simulation also requires students to interact directly with the computer through the use of Decwriters. Far this reason they may become blasé about the use of computers and data processing in business. At any rate, those students without the "hands on experience" ranked data processing much more important.

CONCLUSIONS

On most variables the two groups differed very little in their measures of the relative importance of the different variables. The failure to show significant differences may be attributed to several reasons. First, there may be no real difference as a result of either experiencing this simulation or the group of cases assigned. Perhaps a simulation with greater emphasis on marketing decisions would result in a heightened appreciation of marketing functions. (This possibility is being tested this semester with a simulation named BUSIM which is much more conventional in operation.)

Second, there may well be other factors that over-ride the effect of the simulation. Students may forget about these classroom activities in lieu of their own majors, be. accounting majors in both groups may rate financial matters more important and forget about or wash-out the effect of a single class.

Third, no pre-measurement was taken so the absolute effectiveness of the two methods (case and simulation) could not be determined. Also, these groups were self- selected, not randomly assigned. While this does not necessarily make the groups different, it does increase this possibility. Post-measures do not show any significant differences in the two groups; grades, majors, and grade-point averages were similar for both groups.

SUMMARY

This exploratory study found the simulation group definitely felt organizing was more important than any other single activity. A data collection instrument has been developed that with refinements may be used to compare different teaching techniques. Much more research is needed to determine the most effective uses of cases, simulations, lectures and other learning methods, and to identify those areas where each is most appropriate.

For each of the activities listed below, please indicate how important you believe that activity to be to the success of a business firm.

Market Research

.....
Extremely	Somewhat	Somewhat	Extremely
Unimportant	Unimportant	Important	Important

Sales Forecasting

.....
Extremely	Somewhat	Somewhat	Extremely
Unimportant	Unimportant	Important	Important

Production Scheduling

.....
Extremely	Somewhat	Somewhat	Extremely
Unimportant	Unimportant	Important	Important

Labor Relations

.....
Extremely	Somewhat	Somewhat	Extremely
Unimportant	Unimportant	Important	Important

Financial Planning

.....
Extremely	Somewhat	Somewhat	Extremely
Unimportant	Unimportant	Important	Important

Advertising

.....
Extremely	Somewhat	Somewhat	Extremely
Unimportant	Unimportant	Important	Important

Cost Accounting

.....
Extremely	Somewhat	Somewhat	Extremely
Unimportant	Unimportant	Important	Important

Pricing

.....
Extremely	Somewhat	Somewhat	Extremely
Unimportant	Unimportant	Important	Important

Strategy Formulation

.....
Extremely	Somewhat	Somewhat	Extremely
Unimportant	Unimportant	Important	Important

Policy Setting

.....
Extremely	Somewhat	Somewhat	Extremely
Unimportant	Unimportant	Important	Important

Corporate Planning

.....
Extremely	Somewhat	Somewhat	Extremely
Unimportant	Unimportant	Important	Important

Managerial Accounting

.....
Extremely	Somewhat	Somewhat	Extremely
Unimportant	Unimportant	Important	Important

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Data Processing

.....
Extremely Somewhat Somewhat Extremely
Unimportant Unimportant Important Important

Business Law

.....
Extremely Somewhat Somewhat Extremely
Unimportant Unimportant Important Important

Ethics

.....
Extremely Somewhat Somewhat Extremely
Unimportant Unimportant Important Important

Organizing

.....
Extremely Somewhat Somewhat Extremely
Unimportant Unimportant Important Important

Operation Research

.....
Extremely Somewhat Somewhat Extremely
Unimportant Unimportant Important Important

Organization Structure

.....
Extremely Somewhat Somewhat Extremely
Unimportant Unimportant Important Important

REFERENCES

- [1] Decker, Ronald L., Waedt, Fred A., Allen, Stuart J., Headington, Mark R., "Foundry: A Foundry Simulation," Insights into Experiential Pedagogy, April 1979, pp. 305-309.
- [2] Wolfe, Joseph, "The Effects and Effectiveness of Simulations in Business Policy Teaching Applications," Academy of Management Review, April, 1976, pp. 47-56.