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THE SBI PROGRAM AND STUDENT OUTCOMES: A STUDY OF BUSINESS POLICY CLASSES

Larry R. Watts
William T. Jackson
Stephen F. Austin State University

ABSTRACT

This study represents a preliminary inquiry to determine the value of combining SBI and Policy into a singular curriculum. A comparison of this combined format was made with the traditional Policy course. A slightly modified Job Diagnostic Survey (Hackman & Oldham, 1975) and a skills/usefulness scale (Hoffman, Fontenot & Viswanathan, 1990) was administered to assess the difference between the two groups. Results suggested that the combined format met or exceeded the outcomes of the traditional Policy course.

INTRODUCTION

Changing demands in the workplace require more than just technical competence from our business school graduates. Fontenot, Haarhues and Hoffman (1991) reported that employers are also demanding "...skills in leadership, problem solving, oral and written communication, along with attributes of motivation and assertiveness" (p. 56). Their study comparing the effectiveness of Small Business Institute (SBI) courses and Business Policy courses in developing desired student skills indicated that policy courses were more effective in developing analytical skills and that SBI courses were more effective in developing interpersonal and operational skills.

While the comparative design of the Fontenot, et al. study did document the singular value of SBI projects, it is important to extend this stream of research and assess the possible synergies from Business Policy courses that integrate SBI projects into their course curricula. Furthermore, since the Business Policy course and SBI project are configured to maximize student related outcomes, it is also important to assess the task design characteristics of the learning experience. Therefore, the purpose of this study is not to replicate earlier studies that demonstrated effective skill development in separate SBI or Policy courses, but rather to compare the student related outcomes and task design characteristics of Business Policy classes that integrate SBI projects into the course curricula and Business Policy classes that do not. A secondary purpose will be to provide confirmatory evidence for the study conducted by Viswanathan, Fontenot and Hoffman (1992) that the SBI program provides valuable training for business students enrolled in the program.

Before specifically examining the study conducted to accomplish these objectives, background information providing the foundation of the study is in order. This will be done by providing a brief discussion of the business policy course, the SBI program, and Jobs Characteristic Theory.

BACKGROUND

Business Policy

Business Policy is the designated capstone course for the Bachelor of Business Administration degree. The intended objective of the course is to integrate students' knowledge in various functional areas of business into a comprehensive view of the firm as it interacts with the competitive environment (Watts & Hudnall, 1991). A combination of related activities is typically used to achieve this objective. Lectures present concepts associated with strategic management, while direct participation in a business simulation and case analyses requires students to apply these concepts to actual organizational situations.

Small Business Institute

The SBI program was introduced in 1972 to provide free consultation to small businesses using advanced business school students. Initially, this interaction was intended primarily for the purpose of preventing further Small Business Administration (SBA) loan losses. It was envisioned that the program would, however, evolve to specifically address all small business problems (Burr & Solomon, 1977).

Even though the worth of the program to small businesses was often questioned (Jackson, Vozikis & Babakus, 1992), the value to students was not (Burr & Solomon, 1977; Longnecker, 1977; Hicks, 1977; Judd, 1979). Where these early studies tended to support the benefits derived by students from a conceptual point of view, recent research has suggested a need to empirically evaluate the SBI's contribution to the educational process (Fontenot, et al., 1991).

At the university under study, SBI student projects are an integral part of the curricula in two sections of Business Policy. The professor in charge of these sections is responsible for developing the small business client, forming student consulting teams, assigning a faculty advisor to the team, assigning the team to a client, assessing the progress of consulting teams, monitoring Small Business Administration (SBA) documentation, and assuring the quality of completed student reports. In addition, the course is structured around the SBI projects to ensure that the integrity of both requirements (Policy curriculum and SBI case quality) is upheld.

Skill Development

Project-oriented courses help develop student skills by requiring a practical application of theoretical concepts learned in the classroom (Ater & Coulter, 1980). The process of integrating theory and practice under "real world" conditions appears to enhance students' technical and interpersonal skills (Lawrence, 1990). To assess the effectiveness of SBI programs in developing desirable workplace skills Hoffman, Fontenot and Viswanathan (1990) constructed a skills/usefulness scale to measure student perceptions of skills and knowledge acquired in the SBI class for quantitative versus non-quantitative student majors. A modified version of this instrument was later used by Fontenot, Haarhues and Hoffman

(1991) to compare the skills and knowledge acquired in SBI courses and Business Policy courses. In absolute terms, both courses were perceived as useful in developing analytical skills, interpersonal skills, operational skills, and career usefulness. In relative terms, SBI courses were perceived as being more useful in developing interpersonal and operational skills, while Business Policy courses were perceived as being more useful in developing analytical skills and career usefulness.

Task Design

The challenge faced by the Business Policy professor is how to best configure course activities to maximize student related outcomes. Conceptually, configuring course activities is similar to designing jobs for enhanced performance. Research suggests that job analysis and design techniques developed for work environments can be used successfully in an educational setting (Watts & Hudnall, 1991; Watts, 1992).

The Job Characteristics Theory is a comprehensive framework of task design processes developed by Hackman and Oldham (1976; 1980). At the center of the theory are three critical psychological states. These states are seen as primary determinants of personal and work outcomes. That is, to the extent there is experienced meaningfulness, experienced responsibility for work outcomes, and knowledge of results, there should be high internal work motivation, high quality work performance, high job satisfaction, low absenteeism and low turnover. The rise of these critical psychological states is, in turn, predicated on the presence of five core job characteristics. The theory further recognizes the moderating role of individual differences by including individual growth need strength.

The Job Diagnostic Survey (JDS) translates the Job Characteristics model into a practical tool for diagnosing jobs before re-design and then evaluating the effects of the re-design effort. The JDS (Hackman & Oldham, 1975) measures perceptions of core job characteristics, critical psychological states, growth need strength, internal work motivation and job satisfaction. The JDS is a refinement of the earlier Yale Job Inventory (Hackman & Lawler, 1971), and was designed specifically to measure each of the variables in the Job Characteristics model.

METHOD

Subjects

The subjects for this study were 178 senior level undergraduate business students at a state supported university. The students were enrolled in the five sections of Business Policy taught during the Fall semester of 1992. The five sections were taught by two professors, one of whom taught the two sections with SBI projects.

For statistical comparison each professor's classes were combined into one group. Sixty-nine (69) students in the combined SBI/Policy classes and 109 students in the traditional Policy classes were administered the survey. A reasonably comparable sample, in terms of academic background and sex, was obtained, and no adjustments were required.

In addition, the Policy curriculum administrator insists upon relative uniformity between all Policy sections. So, the only difference between SBI/Policy and the traditional Policy sections is that in lieu of a major text book case the SBI project is accomplished. Each section covers the same text book, administers the same number of exams, and conducts a computer simulation project. Naturally, each professor's approach to classroom activities is unique to that faculty member.

Measures

The JDS was used to collect perceptions of core job characteristics, critical psychological states, growth need strength, internal work motivation and job satisfaction. Only minor changes in the wording of the JDS were made to adapt the instrument to the classroom setting. The skills/usefulness instrument used by Fontenot, et al. (1991) was administered to collect perceptions of skills and knowledge acquired in the classes. Minor changes in the wording of the questionnaire were made to adapt the instrument to the research setting, and a seven point scale was used to maintain consistency with the JDS.

Procedure

To capture the influences of course related activities, the instrument was administered late in the semester. Participation was voluntary with no rewards or inducements offered. On a predetermined date, both professors announced in class that they had been asked to participate in an important study and administered the questionnaire.

Research Questions

Although Fontenot, et al. (1991) had laid the foundation for continued research into the usefulness of the SBI program for participating students, no studies exist that actually address the value of the SBI program conducted in Business Policy classes. In light of this fact, this study was viewed as a preliminary inquiry into the area. Therefore, several general hypotheses were developed.

H1: Core job characteristic skill development will be greater in those classes that include the Policy curriculum as well as SBI compared to those classes that only include the Policy curriculum.

H2: Critical psychological states development will be greater in those classes that include the Policy curriculum as well as SBI compared to those classes that only include the Policy curriculum.

H3: Affective outcomes will be greater in those classes that include the Policy curriculum as well as SBI compared to those classes that only include the Policy curriculum.

H4: Individual growth needs will be enhanced in those classes that include the Policy curriculum as well as SBI compared to those classes that only include the Policy curriculum.

In addition to testing the above research questions, a comparison of the results will be made against management norms as established by Job Characteristic Theory (Oldham, Hackman & Stepina, 1979). This is important to ensure that both course designs are meeting their academic obligation.

ANALYSIS OF RESULTS

Results from both class groups were compared using simple t-tests to determine if the groups were similar. This was accomplished for each section of the survey instrument: job characteristics; psychological states; affective outcomes; and, job growth needs. Table 1 provides a breakdown of the answers received in each group, and Table 2 provides the actual statistical significance results of this comparison.

When examining those variables concerning basic job characteristics, three specific areas showed statistical significance between groups. It is not surprising that students felt that greater skills were necessary in the combined course than in the Policy class alone. The students enrolled in the courses were in their last semester of undergraduate work and had been subjected to an almost exclusive focus of major corporations as opposed to the small business community throughout their four year academic career.

Two other variables showed even greater significance within the job characteristic variables. Task significance (was the outcome important?) and autonomy (can one student make a difference?) were justifiably important in the combined class. Students had been placed in an environment where not only were they expected to learn a concept, but also to directly help an individual or individual business. Most students readily accepted this added challenge from a group perspective as well as from an individual perspective.

Two variables, not showing significance, deserve some discussion. The two groups did not differ on task identity (closure) and a highly related issue, feedback. The nature of the SBI project as well as the regular Policy curriculum, usually affords a high degree of ambiguity up to the last few days of class. The survey was administered before either class had all their graded measurements returned. This would naturally effect a student's perception of closure and feedback from the task.

Figure 1 graphically demonstrates the relationship of these variables discussed above. In addition, except for the area of autonomy, the combined SBI/Policy course out performed the standards established for a traditional business setting.

The effect the combined course had on the experience of psychological states was also interesting. The SBI students experienced more work meaningfulness as well as a feeling of responsibility associated with their projects. Once again, the issue of concern over grades may well have affected the third psychological state, knowledge of results. In addition, as is the case with many SBI projects, the team is unable to witness many of their recommendation implementations.

TABLE 1
Overall Results by Class

Policy Class (Number = 109)

VARIABLE	MIN	MAX	MEAN	S.D.
SKILL	2.0	7.0	5.86	1.04
IDENTY	1.0	7.0	4.83	1.30
TSK SIG	1.0	7.0	5.44	1.55
AUTONMY	2.0	7.0	4.50	1.19
FEEDBK	1.0	7.0	4.47	1.28
FDBKAG	1.0	7.0	4.95	1.43
MEANING	1.0	7.0	5.01	1.30
RESPNSIB	2.0	7.0	5.11	0.94
KNOWLEDG	1.0	7.0	4.15	1.56
GEN SAT	1.0	7.0	4.78	1.24
WORK MOT	2.0	7.0	5.81	0.90
GROWTH N	1.0	7.0	5.38	1.20
MPS	7.0	295.8	112.98	58.30
ANAL SKL	2.0	7.0	5.80	0.96
INTR SKL	1.0	7.0	4.35	1.29
OPER SKL	1.0	7.0	4.49	1.27
CAREER U	1.0	7.0	5.06	1.35
AGE	21.0	35.0	23.07	2.05
GPA	2.0	4.0	2.72	0.38

SBI/Policy Class (Number = 69)

VARIABLE	MIN	MAX	MEAN	S.D.
SKILL	4.0	7.0	6.19	0.84
IDENTY	2.0	7.0	4.78	1.37
TSK SIG	1.0	7.0	6.10	1.37
AUTONMY	2.0	7.0	5.07	1.17
FEEDBK	1.0	7.0	4.43	1.31
FDBKAG	2.0	7.0	4.96	1.15
MEANING	1.0	7.0	5.46	1.30
RESPNSIB	4.0	7.0	5.66	0.75
KNOWLEDG	1.0	7.0	4.30	1.52
GEN SAT	3.0	7.0	5.73	0.89
WORK MOT	1.0	7.0	5.86	0.88
GROWTH N	2.0	7.0	5.58	0.98
MPS	6.3	295.8	131.64	58.22
ANAL SKL	4.0	7.0	6.06	0.74
INTR SKL	3.0	7.0	5.70	1.11
OPER SKL	1.0	7.0	4.62	1.52
CAREER U	2.0	7.0	5.57	1.16
AGE	21.0	41.0	23.36	3.07
GPA	2.1	3.4	2.67	0.34

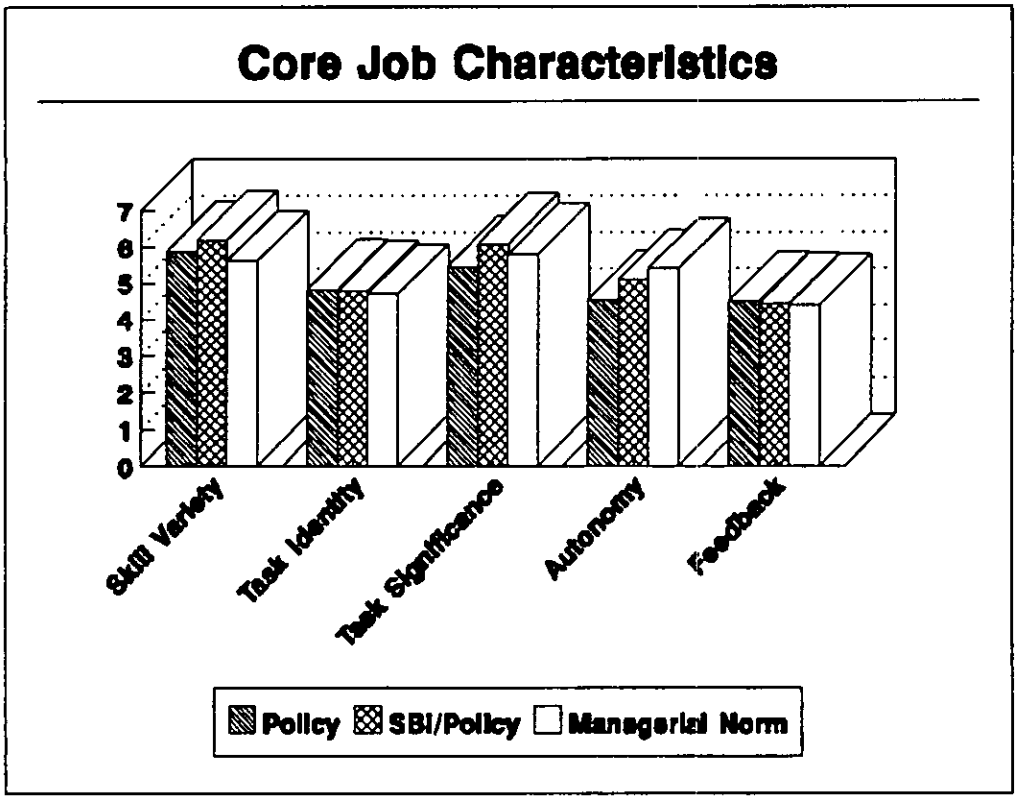
TABLE 2
T-Test Results

Variable	General Description	P Value
Core Job Characteristics		
Skill variety	greater skills needed	.0239*
Task identity	task closure allowed	.7910
Task significance	outcomes important	.0039*
Autonomy	freedom, independence	.0024*
Feedback	feedback from work	.8509
Experienced Psychological States		
Meaningfulness	work is meaningful	.0293*
Responsibility	responsible for outcomes	.0001*
Knowledge of results	final outcomes known	.5253
Affective Outcomes		
General satisfaction	independent thought used	.0001*
Internal work motivation	work stimulating/challenging	.7159
Motivating Potential	composite score**	.0405*
Skills/Usefulness		
Analytical skills	use and growth of anal. skills	.0409*
Interpersonal skills	use of interpersonal skills	.0001*
Operational skills	use of entrepreneurial skills	.5642
Career usefulness	prepares for future career	.0101*
Demographics		
Age		.4923
Grade Point Average		.3464

* Indicates a significance difference between groups.

** Score was computed using the following formula:

MPS =((Sk. var. + task id. + task sign.)/3)(autonomy)(job feedback)



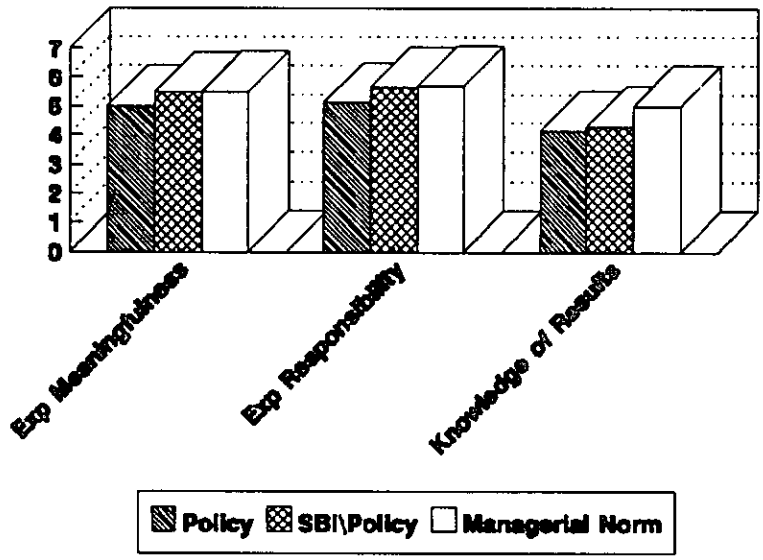
As can be gleaned from examining Figure 2, both the SBI/Policy and Policy courses may be considered as academic exercises when compared to the management norms of a traditional organization. While a legitimate attempt may be made to make the course as realistic as possible, it is still a classroom experience.

Under affective outcomes, it was obvious that the SBI students had a higher level of general satisfaction. This is easily related to the opportunity to accomplish a "real world" project as opposed to another text book exercise. The variable of work motivation showed no statistical difference even though there was a slight increase in students' scores.

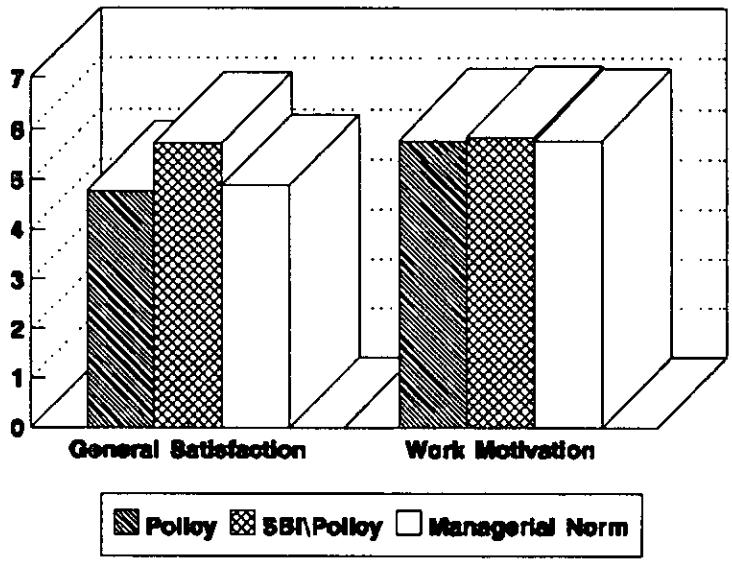
Once again, both the SBI/Policy course as well as the traditional Policy course fared better than management norms. This can be seen in Figure 3.

There was only one variable that did not show significance in the categories involving growth opportunities. The work was motivating, increased analytical and interpersonal skills, and was seen as useful for future employment. It did not, however, increase operational (entrepreneurial) skills. A possible explanation for this could be that many of the students recognized the difficulty involved in running a small business, and this increased their apprehension to do so.

Critical Psychological States



Affective Outcomes



DISCUSSION/IMPLICATIONS/LIMITATIONS

As stated in the opening paragraphs, the main purpose of this research was to assess the appropriateness of combining SBI requirements into the Policy course curriculum. The statistical results obtained from analysis provided generally favorable support of this combination. In all cases of comparison included in core job characteristics, psychological states, and affective outcomes, the combined class performed as well if not better than the traditional Policy curriculum.

In addition, as was suggested from the Fontenot, et al (1991) study, job growth needs were adequately met by this combined format. Management norms for an organizational setting were also generally equaled or surpassed.

There are several areas of concern, however, that should not be dismissed simply from the results of this study. The SBI course, regardless of the instructional format, is an academic challenge and should only be taught by someone with the experience to convey the difference between major corporations and the small business community. In addition, not every faculty member is willing to commit to the extra time and energy necessary to combine the two approaches to learning.

Further, it should be pointed out that this preliminary inquiry into the usefulness of a combined course is just that, a preliminary inquiry. Others that use this format at their institution should be encouraged to further this vein of research.

The findings in this study may also suggest that major curricula changes should be considered above what is the case with a combined SBI/Policy course. As is the case with this university, a new course has been designed that amounts to a six hour course--three hours for the traditional Policy curricula and a three hour course for the SBI case project. It would be beneficial for any school experimenting with course re-design for the SBI program to collect data and report those for other universities to consider.

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