This study examined connections between the educational process and attitudes toward organizational change among business students. A total of 758 undergraduate and graduate students from both the arts and sciences and business were surveyed with a measure of attitude toward change. The study employed a three-way analysis of variance using the factors of Year (undergraduate vs. graduate), Major (Arts & Sciences vs. Business), and Work Experience (less than 4 years vs. 4 years or more) with the total score on the instrument as the dependent variable. Statistically significant but minor differences were found for all three of these factors. The study concluded that business schools may not be adequately preparing their students for the prevalence of constant change in the business world. Recommendations include (1) that courses on organizational change be adopted, (2) that aspects of organizational change be included in nearly all business courses, (3) that laboratory groups be developed that focus on change, and (4) that change management forums be created where outside speakers are invited to talk about various features of organizational change. Contains 13 references.
Coping with Organizational Change: Are We Adequately Preparing Our Future Managers?

ABSTRACT

The purpose of this study was to explore connections between the educational process and attitudes toward change among business students. Using an instrument to measure attitude towards change, Arts & Science students, both undergraduate and graduate, were compared to business students, again both undergraduate and graduate. A total sample size of N = 758 yielded some significant results, but these differences were deemed to be not meaningful.

It was concluded that business schools may not be adequately preparing their students for the prevalence of constant change in the business world. Recommendations were then made, for changes in the current business curriculum, to better prepare students for organizational change.
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Coping with Organizational Change: Are We Adequately Preparing Our Future Managers?

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Running head: Organizational Change
Coping with Organizational Change: Are We Adequately Preparing Our Future Managers?

It has become a truism to point out that managers in any type of business or organization now confront an accelerating pace of change. Indeed, domestic tumult has only been exacerbated by global upheavals in the Soviet Union, Eastern Europe, the opening of the European market, and the technological acceleration of the Pacific Rim. This escalation of change has become extreme enough to be called "chaos" or "turbulence" (Doeringer, 1990; Drucker, 1980; Peters, 1987).

In the face of such a turbulent environment, we management educators must ask ourselves if we are adequately preparing our students to respond to change. When this question was addressed to fellow faculty members at the Adelphi University Schools of Business (including the School of Banking and the School of Business Administration and Accounting), we heard these kinds of rejoinders:

* Definitely! I always cover changes in the field. I relate the latest theories and revisions from the last ten years.

* I have to, after all, the tax system is so dramatically different that last year's procedure is already obsolete.

* We didn't even have LOTUS ten years ago! And now it's mandatory for the course.

Asking this same question to colleagues in other universities with comparable business schools led to a similarity in responses.
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It is important to notice how the concern of the faculty was on both keeping abreast of their fields as well as relaying this new research and methods to their students. Our question, however, had a different slant. It was not about keeping abreast of a changing field, it was about dealing with the fact of change itself. That is, what are we doing as educators in preparing our students to cognitively, emotionally, and behaviorally handle a world of constant change?

Our next step was to explore in what manner the management of change was included in courses in our Schools of Business. A perusal of course syllabi revealed a paucity of material on change. In fact, on the undergraduate level, the subject of change in organizations is only included as one rather small piece in two undergraduate courses: "Introduction to Management" and "Organizational Behavior." In these courses organizational change is covered directly only as a partial aspect of three topics: stress; business strategy; and organization development. Change is also brought up indirectly during lectures on leadership and organizational design. On a graduate level, organizational change is included in the courses entitled "Management Theory and Organizational Behavior", "Human Resource Administration", and "Business Policy." Thus, purely from the perspective of a review of our curricula, it appears we are not doing a great deal of education about change. Moreover, the little education that is done is confined to a cognitive level, with nothing on an affective or behavioral level.
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Although much academic work has been aimed at understanding organizational change (Gemmill & Smith, 1985; Goldstein, in press; Leifer, 1989; Miller, 1982; Sheldon, 1980), there has not been a corresponding exploration of how students can be taught to more effectively deal with such change. Certainly, there are many factors involved in a person's attitudes toward change. For example, Nedd (1971) found that personality factors, including both affective and cognitive dimensions, may be a determining factor in attitudes toward change in a metal fabricating plan. In addition, Hardin (1967) found a correlation between job satisfaction and openness to change. But none of this research looked at how people could be academically prepared to deal with change.

Perhaps, our students are being educated about change in a more elusive or indirect manner. Thus, the authors decided to find out from the students themselves by using a survey that measures attitudes toward change. We were searching for differences in mean scores that would suggest if our students' attitudes to change were undergoing a shift as a result of their business education. To help pinpoint the factors involved, we decided to compare students from the Schools of Business with students from the College of Arts and Sciences. Our aim was to compare students' attitude to change with their length of time in school as well as their job experience. Therefore, our initial hypotheses were that the survey results would not show a significant difference in mean score of favorability to change.
between undergraduate and graduate students, and that there would not be a significant difference in mean score of favorability to change between the Business student and the Arts and Sciences students. This would then indicate that Business students were no better prepared for change than Arts and Sciences students, and, moreover, that length of time in school was not a factor in attitude toward change.

Method

Procedure

Because of the surprising dearth of research and literature dealing with attitudes toward change, we had to go back to the late 50s and early 60s to find research dealing with the actual measurement of attitudes toward change. Trumbo (1961) developed a survey instrument he proved reliable and valid for measuring attitudes toward change among employees of an insurance company. Higher scores were equivalent to more favorable attitudes to change--this favorability having to do with flexibility, openness, and responsiveness to change. Trumbo did not indicate whether his questions focussed on cognitive or affective dimensions of attitudes toward change. However, it seems from a perusal of his questions, that the survey instrument combined both dimensions.

We decided to use Trumbo's instrument because, even though
it was originally designed for employees and not students per se, most of our students also worked full or part-time jobs. Also, Trumbo's survey has been successfully utilized by other researchers to correlate employee attitudes toward change with age, education, rank, and various personality characteristics (Kirton & Mulligan, 1973). Thus, along with the Trumbo questionnaire we also included demographic questions on: gender; age; year in school; major; approximate G.P.A.; number of years of work experience; and managerial status.

Sample

To compare the attitudes of undergraduate and graduate students in the Schools of Business with the School of Arts and Sciences, we gave out surveys to both of these sectors of the university (the survey questions are available from the authors on request). Professors, chosen at random, were given instructions to have their students fill-out the surveys during class. A total of 758 students filled-out the surveys (N=758): 221 graduate Business; 227 undergraduate Business; 149 Arts and Sciences graduate; and 161 Arts and Sciences undergraduates.

Results

A three-way Analysis of Variance (ANOVA) (N=758) was performed using the factors of Year (undergraduate vs. graduate),
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Major (Arts & Sciences vs. Business), and Work Experience (less than 4 years vs. 4 or more years) with the total score on the instrument as the dependent variable.

The analysis showed no significant interactions between the three factors, nor any significant interactions between any pair of factors (two-way interactions). It did show significant differences for each of the factors: Year, Major, and Work Experience. Bi-variate t-tests were then performed on these factors and the results are shown in Table 1.

Insert Table 1 about here

As indicated in Table 1, the graduate students scored significantly higher than the undergraduate students (p<.01). Additionally, Business students scored higher than Arts and Sciences students and those with more work experience scored higher than those with less work experience (both p<.01).

Taking the Year of the student and breaking it down into subgroups based on Major, Table 2

Insert Table 2 about here

shows the difference in the mean of the responses for Arts and Sciences versus Business students with respect to whether they are graduate or undergraduate students. As indicated, Business.
students scored significantly higher on both the undergraduate (p<.05) and graduate levels (p<.01).

Controlling for Gender, a three-way ANOVA was performed on the male respondents and then on the female respondents. Both analysis showed no interactions and gender did not account for any differences in the scores.

Discussion

Our study's aim was to explore connections between the educational process and attitudes toward change among business students. To that end, we first compared B students with A&S students. While it was hypothesized that there would not be a significant difference in mean score, it turns out the difference was significant (29.4 vs. 28.1).

However, the survey instrument contained 9 questions, each with a range of possible answers from 1 to 5. Thus, the total score per individual could range from 9 to 45. The difference of 1.3 points found between the Business and Arts and Sciences students, while significant, represents only a difference of 3% of the total point score (1.3/45=.03) and, as such, is not considered to be meaningful.

The difference between undergraduate and graduate students, again significant, was only 1.9 points or 4% (1.9/45=.04) of the total possible score. In fact, this difference of 1.9 points was the largest absolute difference in mean score between the various
subgroups studied. It is, therefore, claimed, that these differences, while significant, are not meaningful and B students do not appear to be any better prepared for dealing with change than A&S students. Additionally, length of time in school as measured by undergrad vs. grad students, does not appear to be a factor in the students' attitude toward change.

It might be the case that there are significant and meaningful differences between Arts and Sciences students and Business students in either their personality dimensions or their levels of job satisfaction. To be sure, a limitation of our study was that we did not control for either personality differences or job satisfaction ratings. However, the results of our survey do suggest that there may be a problem of neglect, on the part of business educators, in preparing their students for the turbulent world of organizational change.

Recommendations

How can business schools remedy this situation? What seems necessary is that pedagogical emphasis needs to expand from simply covering new contents in a field to also include the process of adapting and responding to change. We propose that an appropriate starting place to facilitate this pedagogical shift is in the opening up of faculty discussion on this critical topic. Faculty meetings could be forums for discussing how changes in the business world are affecting their respective
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areas of study. Also, faculty committees can be established to look into how organizational change could be incorporated into curricula.

The following recommendations are offered to establish adaptability to change as an essential part of business education:

1.) Course on Organizational Change:
Make this course a mandatory requirement for both undergraduate and graduate business education. The topics of this course could include:

* Changes in the world of business: internal and external
  -internal changes, eg. structure, pay systems, etc.
  -external changes, ie, environmental changes, market
c  changes, labor pool changes.
  -new models for viewing organizational change
* Understanding resistance to change:
  -affective and cognitive dimensions of resistance
  -expecting and respecting resistance
  -new models for conceptualizing resistance
  -what to do about resistance
* Psychological dimensions of change:
  -factors determining attitudes toward change
  -affective elements
  -personality factors
  -cognitive considerations
  -change and the stress response
  -psychotherapy and the fear of change
* Innovation and creative responses to change
* Planned change and organization development
* Culturally specific responses to change
  -the anthropology of social change
  -change in different societies

2.) Include aspects of organizational change in nearly all business courses:
For example, accounting courses could include sections on how
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Accountants cope with changes in the tax code, finance courses could include studying the ramifications and consequences of changes in investment strategies, leveraging, and so on; and business policy courses could include sections on the human resource implications of proposed changes in policies and methods.

3.) Laboratory groups (T-groups) focusing on change:
In these groups, students can explore their own emotional and cognitive responses to changes in both their professional and personal lives. These groups could be given as either weekend seminars or weekly or biweekly meetings. Experts in group facilitation could be contracted to lead these "change process" groups.

4.) Change Management Forums:
Create forums where outside speakers are invited to talk about various features of organizational change. Make participation in these forums a requirement for graduation.

Conclusion

Certainly, one limitation of our particular study was that it was only conducted at one university's business school. However, the composite of our student body plus the large sample may suggest that this study has significance beyond this one
university. Indeed, if business schools are to be relevant to the real business world, they must be preparing their students for the prevalence of constant change in this world. We are doing an injustice to our students if we are not providing them with the requisite skills for navigating through the chaos and turbulence of our contemporary business world.

References


TABLE 1. Attitude Towards Change: Mean Scores and Standard Deviations for the Factors of Year, Major, and Work Experience

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* P < .05  ** P < .01