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The Ability of Work Related Rewards to Predict the Organizational Commitment of Health Occupations Education Teachers

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Abstract: The purpose of this study was to explore the ability of extrinsic and intrinsic work related rewards to predict the organizational commitment of health occupations education teachers. The dependent variable was organizational commitment. The independent variables included the intrinsic work related rewards—autonomy, significance, and involvement; and the extrinsic work related rewards—supervision, coworkers, promotion, general working conditions, and salary. Stepwise multiple regression analysis revealed a model for health occupations education teachers which included two intrinsic and one extrinsic work related rewards.

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The Metropolitan Life Survey of the American Teacher (Metropolitan Life Insurance Company, 1984) identified a number of problems facing teachers and the teaching profession. This report indicated that low salaries, poor working conditions, lack of prestige, and limited input into school decisions have caused dissatisfaction and excessive turnover in the teaching profession. Today, total quality management, school restructuring, and teacher and student empowerment are just a few of the buzz words being used to suggest reforms in the current educational crisis.

Literature that addresses educational reform includes Educational Renaissance by Cetron and Gayle (1991), who devote one chapter of the book to the examination of teaching, a profession in chaos. In 1987, they found the annual salary for beginning teachers averaged $17,500; by comparison, beginning accountants earned approximately $21,200, computer specialists earned $26,170, and engineers earned $28,500. The pay scale has improved little since then. Because of starting salaries, teachers’ colleges are unable to recruit the best students. Teacher educators point out that there are too few teachers to go around and predict that this shortage will continue well into the 21st century. By the time a teacher has been teaching in the classroom for five years, there is a 50% chance that he or she will leave the profession; if the teacher is employed in an urban area, that chance increases to 75%.

Why this high dropout rate among teachers? Lack of commitment, stress, burnout, poor salaries, and lack of power in the school have all been suggested as possible precursors of teachers leaving the profession. To counteract the high dropout rate, the profession needs to seek answers to these and other questions concerning the work related rewards of teachers. Teaching does not occur within a vacuum. Schools, school administrative personnel,
resources, coworkers, salaries, and other variables impact the work-related rewards of teachers and their attitudes toward the organizations in which they work. O’Brien, Akroyd, and Richards (1993) noted that

. . . some teachers report being extremely pleased with their schools and school systems, and appear to be quite dedicated to the overall success of those organizations. Often, such teachers are more involved in general school activities and usually enjoy pleasant longevity in their positions. Other teachers, however, report being very displeased with their schools and consequently are disinterested in the overall success of their schools. These teachers tend to be involved in the general activities of their schools as little as possible and may actively seek reassignment or relocation. In many ways, the organizational commitment of teachers is vital to the overall effectiveness of schools.

(p. 4)

The purpose of this study was to explore the ability of extrinsic and intrinsic work rewards to predict the organizational commitment of health occupations education teachers. A review of the literature revealed that only a few studies have focused on the work related rewards of vocational teachers. One study (Akroyd, Richards, & O’Brien, 1992) reported the predictive value of work related rewards as determinants of health occupations education teachers’ work satisfaction. Another study (Berns, 1989) identified the work related rewards of marketing education teachers. O’Brien, Akroyd, and Richards (1993) studied the work satisfaction and organizational commitment of marketing education teachers. No research studies addressed the organizational commitment of health occupations education teachers.
work related Rewards

The literature revealed that work related rewards were studied most commonly in reference to their relative importance as determinants of work satisfaction. Herzberg (Herzberg, Mausner, Peterson, & Capwell, 1957) proposed two basic classes of work rewards: (a) intrinsic factors such as achievement, recognition, and advancement; and (b) extrinsic factors such as pay, working conditions, and job security. Work satisfaction is viewed as the level and direction of an emotional state, or affective orientation, resulting from the appraisal of one's work and work experience and, in part, is a function of the individual's work rewards (Kallenberg, 1977; Locke, 1976; Ronen, 1978). Most theorists have argued that the overall level of work satisfaction is determined by some combination of the various facets of work rewards such as satisfaction with salary, coworkers, and supervisors. They have agreed that a two-factor model appears to explain the general trends reflected in the data (Campbell & Pritchard, 1976; Dyer & Parker, 1976). Mottaz and Potts (1986) found the perceived reward model to be the most appropriate procedure for predicting overall work satisfaction. The model consisted of three intrinsic rewards: task autonomy, task significance, and task involvement; and six extrinsic rewards: supervisors, coworkers, working conditions, salary, promotional opportunities, and fringe benefits.

Akroyd et al. (1992) found that selected intrinsic and extrinsic rewards were predictive of health occupations education (HOE) teachers' work satisfaction. Task involvement, an intrinsic reward, contributed more to HOE teachers' perceptions of their work satisfaction than general working conditions and salary, extrinsic rewards, but all three were significant at the .01 level.
Od
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Monday, Porter, and Steers (1982) offered a definition of organizational commitment which has three components (a) a strong belief in and acceptance of organizational goals and values, (b) a willingness to exert considerable effort on behalf of the organization, and (c) a strong desire to maintain membership in the organization. Research on organizational commitment has been examined primarily in relation to turnover (Ferris & Aranya, 1983; Horn, Katerberg, & Hulin, 1979; Huselid & Day, 1991; Mowday, Steers, & Porter, 1979; O’Reilly & Caldwell, 1980; Steers, 1977; Stumpf & Hartman, 1984; Wiener & Vardi, 1980). Other research has established a relationship between job satisfaction and turnover intentions (Angle & Perry, 1981; Bedelian & Armenakis, 1981) and organizational commitment and job performance (Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989). Individuals who are committed to the organization are less likely to leave their jobs than those who are uncommitted (Porter, Steers, Mowday, & Boulian, 1974). Individuals who are committed to the organization tend to perform at a higher level and also tend to stay with the organization, thus decreasing turnover and increasing organizational effectiveness.

As this nation’s schools face a shortage of vocational teachers, more research on organizational commitment is required.

Porter, Crampon, and Smith (1976) investigated the relationship between organizational commitment and turnover. Using a 15 month longitudinal design with a sample of managerial trainees in a large merchandising company, they found that trainees who voluntarily left the company during the initial 15 month employment period had begun to show a definite decline in commitment prior to termination.
Shaw and Reyes (1992) examined elementary and high school teachers’ organizational commitment and workplace values orientation. The values orientation included two underlying value systems. The normative orientation emphasized the cultural values of the organization. Schools with a normative value orientation stress shined behavior norms developed through common group experiences, and are less reliant on formal written policy and pay and time schedules. The utilitarian orientation emphasized the materialistic aspects of organizational control. Schools with a utilitarian value orientation stress scheduling and written policies to regulate teacher work load, teaching, and extra duty assignments. The authors found that elementary school teachers had significantly higher levels of normative orientation and organizational commitment than high school teachers. In another study, Reyes (1990) reported similar findings:

First, it is clear that in those organizations holding a stronger normative orientation, employees are more satisfied with their jobs and are more committed to the organization than employees in organizations holding a stronger utilitarian orientation. (p. 20)

O’Brien et al. (1993) found that two intrinsic rewards (significance and involvement) and three extrinsic rewards (supervision, coworkers, and general working conditions) were significant at the .01 level in predicting organizational commitment of marketing education teachers. They observed that supervision manifested the largest standardize beta weight. Although this is unusual in context of the related literature, they believed that supervision may be a function of the critical leadership role that principals fulfill within effective secondary schools.
Purpose of the Study

The purpose of this study was to explore the ability of extrinsic and intrinsic work rewards to predict the organizational commitment of health occupations education teachers. Specifically, which intrinsic and extrinsic work related rewards significantly contributed to the health occupations education teachers’ perceptions of organizational commitment?

Methodology

Subjects

Subjects examined in this study were health occupations education teachers from three states. The three states included North Carolina, Georgia, and Tennessee. State departments of education provided lists of teachers in the program area.

Instrumentation

The instrument consisted of four parts: (a) sample demographic characteristics, (b) extrinsic work related rewards, (c) intrinsic work related rewards, and (d) organizational commitment. The extrinsic and intrinsic work related rewards and organizational commitment were rated on a four point Likert-type scale: strongly agree (4), agree (3), disagree (2), and strongly disagree (1). The extrinsic and intrinsic work related rewards were measured using an instrument developed by Mottaz (1981). Organizational commitment was measured using the Organizational Commitment Questionnaire (OCQ) developed by Mowday et al. (1979).

The five extrinsic work related rewards included general working conditions, supervision, coworkers, promotion, and salary. General working conditions were defined as the extent to which there were adequate resources to teach, and addressed physical facilities,
equipment, workload, and work hours. The second reward, **supervision**, was defined as the degree to which supervisors were perceived as **supportive** and helpful to **teachers**, and included such traits as competence, fairness, and friendliness. **Coworkers**, the third reward, were defined by the degree to which colleagues were perceived as being supportive and helpful, and included such traits as competence, helpfulness and friendliness. The fourth reward, promotion, was defined as the extent to which the job provided opportunity for advancement, and included both opportunity and fairness. Salary, the **fifth** reward, was defined as the extent to which teachers believed their salary to be comparable to other teachers performing a similar function, and included amount, fairness, and adequacy. 

Mottaz (1985) reported the reliability of these measures as assessed by Cronbach’s alpha, which yielded a reliability coefficient of .71 for general working conditions, .82 for supervision, .82 for co-workers, .82 for promotion, and .83 for **salary** (pp. 369-370). Mottaz (1985) evaluated the construct validity of these scales by factor analysis. Principal components factor analysis with varimax rotation confirmed distinct factors which defined each of the scales.

The three intrinsic work related rewards involved facets associated with one’s job, and included task autonomy, task **significance**, and task involvement. Task autonomy was defined as the degree of self-direction in task performance or teaching. Task significance was defined as the degree to which the task was perceived as a significant contribution to the work process or teaching. Task involvement was defined as the degree to which the task was considered interesting and rewarding in itself. Mottaz (1985) reported the reliability of these measures to be .92 for the autonomy scale, .79 for the **significance**
scale, and .88 for the involvement scale (p. 369). Principal components factor analysis with varimax rotation confirmed distinct factors which defined each of the three scales.

The organizational commitment questionnaire consisted of 15 statements. Mowday et al. (1979) reported a median coefficient alpha of .90 with a range of .82 to .93 for 2,563 employees in nine different public and private work organizations. The authors examined the construct validity through factor analyses. The analyses resulted in a single-factor solution and supported the conclusion that the items measured a single common underlying construct.

Data Collection

A cover letter, questionnaire, and a pre-addressed stamped envelope were mailed to all health occupations education teachers (348) in Georgia, North Carolina, and Tennessee. The questionnaire could be completed within 10 to 20 minutes. A follow-up letter was sent to all teachers who did not respond within two weeks. Questionnaires were returned by 193 (55%) health occupations education teachers.

Data Analyses

Data from the questionnaires were entered into a database and analyzed using Version 6.4 of PC-SAS (SAS Institute, Inc., 1987). Frequency distributions and cross tabulations were used to confirm statistical assumptions. Correlation analyses identified the Cronbach coefficient alpha for the dependent variable and each independent variable. A stepwise multiple regression analysis was run to identify which independent variables (extrinsic and intrinsic factors) were predictors of the dependent variable, organizational commitment, for health occupations education teachers. The magnitude of contribution of each significant variable was determined by its standardized beta weight. A standardized beta weight close to
1.0 indicates a substantial contribution, while a weight close to 0.0 denotes little or no contribution (Pedhazur, 1982). A conservative significance level of .01 was used in all statistical interpretations due to the amount of variance not accounted for by the model.

According to Tabachnick and Fidell (1983), stepwise regression is used to answer the question regarding the best linear combination of independent variables to predict the dependent variable in the sample. Specific to this study, the question could be stated as, “Which extrinsic and intrinsic (independent variables) work related rewards were predictive of organizational commitment (dependent variable)?” In stepwise regression, the sample data, not the researcher, control the order of entry into the model for independent variables. Each independent variable is entered separately into the regression equation according to the amount of unique variance it explains after the other variables’ effects are taken into account. Thus, stepwise regression analyses are seen as model-building rather than model-testing procedures.

Results

Analysis of the multiple regression model yielded significant results. Five of the eight independent variables entered the stepwise model for health occupations education teachers with three of the five significant at the .01 level. In this section, reliability scores are reported for the dependent and independent variables. Then the results are organized and reported as they relate to the purpose and research question.

Reliability

Cronbach’s coefficient alpha for the dependent variable, organizational commitment, was .88, well within the range of .82 to .93 reported by Mowday et al. (1979). The scales
measuring the intrinsic factors of work related rewards yielded alphas of .80 for autonomy, .85 for significance, and .85 for involvement alphas for the extrinsic factors of work related rewards were .69 for general working conditions, .90 for supervision, .82 for coworkers, .92 for promotion, and .71 for salary. In comparing Mottaz’s (1985) reliability findings for the intrinsic factors, two scales yielded smaller reliabilities: autonomy and involvement, while one scale, significance, yielded a slightly higher reliability from this study. In comparing the extrinsic factors of job satisfaction, two scales had smaller reliabilities: general working conditions and salary; two scales had higher reliabilities: supervision and promotion; while one scale had the same reliability y: coworkers from this study. Nevertheless, all reliability scores fell within an acceptable range.

Research Question

Which intrinsic and extrinsic work related rewards significantly contributed to the health occupations education teacher’s perceptions of organizational commitment? Table 1 reports the standardized beta weights for those variables which the stepwise procedure incorporated into the model to explain the predictive ability of the independent variables in relation to organizational commitment of health occupations education teachers. Two intrinsic and one extrinsic work related awards were significant at the .01 level. The factors, in order of their standardized beta weights, included significance (.2411), involvement (.2135), and general working conditions (. 1591 ). Although supervision and coworkers were included in the stepwise model, neither factor was significant at the .01 level. Task autonomy, an intrinsic reward, and salary, an extrinsic reward, did not enter the model. Together, the independent variables accounted for 34% of the variance in the dependent variable in the health
Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized Beta Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significance</td>
<td>.2411*</td>
</tr>
<tr>
<td>Involvement</td>
<td>.2135*</td>
</tr>
<tr>
<td>General Working Conditions</td>
<td>.1591*</td>
</tr>
<tr>
<td>Supervision</td>
<td>.1539</td>
</tr>
<tr>
<td>Coworkers</td>
<td>.1169</td>
</tr>
</tbody>
</table>

Model Statistics:

- R-Square = .34
- F = 21.21
- p = .0001

*p < .01

occupations education model. From the model, it appears that health occupations education teachers perceive the following as predictors of organizational commitment: (a) significance, work is worthwhile and makes an important contribution to teaching; (b) involvement, work is interesting and challenging and provides a sense of personal fulfillment from helping students reach their potential; and (c) general working conditions, there are adequate resources to teachers and addressed physical facilities, equipment, workload, and work hours.
Discussion

Five independent variables entered the model on organizational commitment for health occupations education teachers. Of these five variables, only three were significant at the .01 level. The three variables with their standardize beta weights included (a) significance--.2411, (b) involvement--.2135, and (c) general working conditions-.1591. These same three variables were identified by O’Brien et al. (1993) for marketing education teachers. O’Brien et al. (1993) reported that five independent variables were significant for organizational commitment of marketing education teachers. The five variables with their standardize beta weights included (a) supervision--.2271, (b) significance--.2241, (c) involvement--.1982, (d) coworkers--- 1446, and (e) general working conditions--- 1268.

Similarly, both health occupations education and marketing education are program areas of vocational education. The program areas differ in their approach to teacher certification. Marketing education teachers follow the traditional path to teacher certification. They are graduates of four-year baccalaureate programs in teacher education. Socialization of the students into the teaching profession occurs through courses which provide interactions and experiences with schools, their principals, and teachers. These courses include both observational and actual hands-on teaching experiences under the close supervision of cooperating teachers employed by the secondary schools. Thus, these graduates have many opportunities to explore and experience the actual job performance of teachers and become familiar with the mores of the schools in which they expect to be employed as future teachers.
The same does not hold true for health occupations education teachers. These teachers do not follow the traditional path to teacher certification; they are employed as teachers based on their health specialties (usually nursing) and years of experience in the specialty. They come directly from industry without prior experiences in the school system, Courses in pedagogy are taken only after they are employed as secondary teachers. Therefore, health occupations education teachers have no opportunities to explore and experience the actual job performance of teachers or the mores of the schools.

These two paths to teacher certification may explain the differences in the perceptions of the two groups of teachers. Marketing education teachers perceived supervision as the most important variable in their organizational commitment. Through their previous school experiences, they have had more opportunities to interact with and recognize the importance of school administrators who are supportive and helpful to them in their roles as teachers. Health occupations education teachers have had no such previous school experiences. In their previous roles in industry, they served as independent health care practitioners requiring little or no supervision. They were considered the experts in their respective fields. Although supervision entered the health occupations education model, it was not significant at the .01 level.

Two intrinsic rewards, significance and involvement, were significant to the organizational commitment of both groups of teachers. Both groups perceived their work as worthwhile, really important, and making an important contribution to teaching (significance). Both groups also viewed their work as interesting and challenging and derived a sense of personal fulfillment from helping students reach their potential.
Typically, teachers work in isolation within their classrooms. The feelings of isolation can be counteracted (a) by school administrators who are perceived as helpful and supportive; (b) by coworkers who are friendly and willing to share their expertise; (c) through promotional practices which promote equal opportunity for advancement and recognize teachers’ strengths; and (d) through general working conditions which provide adequate resources, supplies, and equipment for effective classroom teaching.

The only extrinsic variable found in both models of organizational commitment was general work conditions. Both groups of the teachers were concerned with having adequate equipment, supplies and resources for effectiveness in the classroom.

The study yielded important information on what factors contributed to the organizational commitment of health occupations education teachers. Schools administrations could use this information to increase satisfaction and reduce turnover of teachers in the secondary schools. In North Carolina alone, turnover accounted for a substantial number of the 50 plus new health occupations education teachers needed for the 1993-1994 school year. Although administrators are unable to affect directly teachers’ intrinsic values, Akroyd et al. (1992) noted that administrators can modify extrinsic factors in the environment to maximize the effect of such intrinsic values (p, 19). Administrators can provide a supportive environment for teachers by providing (a) equal and fair promotional opportunities for all teachers, (b) opportunities for teachers to interact and be supportive of one another, (c) supervision which is perceived as helpful and supportive by the teachers, (d) the resources and equipment that teachers need to be effective in their classrooms, and (e) public information on the need to
improve teacher salaries. Effective schools require effective administrators and effective teachers. The contributions of effective administrators are paramount to increasing the work satisfaction and organizational commitment of teachers.

References


