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ABSTRACT

The transition from college to full-time employment was compared for graduates of cooperative education (CE) programs and regular baccalaureate degree programs. The focus was the relationship of CE participation to organizational socialization and power within the organization. Responses were obtained from graduates of mandatory CE programs, optional or selective CE programs, and regular degree programs. Scales were administered to assess the accuracy/realism of initial job expectations, the congruence between the needs of the employee and job requirements, employees' perceptions of the relevance of their jobs to their career plans, the strength of an individuals' identification with and involvement in a particular organization, employees' access to resources necessary to complete job duties, and the amount of personal power on the job perceived by the employee. Findings based on path analysis suggest that CE participants have significantly more realistic expectations about their first job after college than other recent college graduates. CE graduates who remained with their former CE employers were most likely to have realistic expectations. It is suggested that an understanding of CE student experiences may help organizations improve organizational entry and reduce turnover. (SW)

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Cooperative Education as a Predictor
of Organizational Socialization and
Sense of Power in First Job After College*

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INTRODUCTION

Cooperative education is an educational strategy which systematically combines academic study with productive work. It was initiated in 1906 by Herman Schneider, a University of Cincinnati professor, as a way of "Hitching the school and shop abreast, rather than in tandem; combining theory and practice." (Schneider, 1910). Today, nearly 900 colleges in the United States (Cooperative Education Research Center, 1984) have adopted the cooperative education plan to meet the needs of their students. Indeed the Research Center data show that cooperative education has expanded so that it now serves 182,000 students in virtually every undergraduate field of study.

Almost eighty years of experience and many research studies have shown consistently that cooperative education benefits all participants: students, employers and educators. One of the most frequently cited claims about cooperative education is that it facilitates the entry of college graduates into the workplace. However, thus far there has been no careful examination of how cooperative education experience affects employee behavior once a co-op student becomes a full-time employee.

The purpose of this research is to compare how graduates of cooperative programs versus those from regular degree programs make the transition into their first full-time job after college and to examine the effect of the transition on employee sense of power. The specific aspects of the transition explored are

degree of (1) realism of pre-job expectations (2) congruence of job with needs (3) relevance of job to future career goals and (4) commitment to the organization.

THEORETICAL FRAMEWORK

Cooperative education affects young adults at three important phases of their lives: (1) as undergraduates; (2) during their transition from student to employee, and; (3) as permanent employees. Cooperative experience provides students with realistic information about careers and organizations, improves their job related skills (Brown, 1976; Wilson and Lyons, 1961) and leads to stronger certainty about career choice and more realistic career goals (Brown, 1976; Weinstein, 1980). Graduates of cooperative programs have greater opportunity to find a job for which they are well-suited than graduates of typical degree programs since they have more contacts for permanent employment and more work experience that is relevant to their career plans (Brown, 1976; Frankel, Cohen and Deane, 1977). Once cooperative graduates become full-time employees, they are more likely than other new college hires to have diverse and challenging assignments, to be involved in their boss' decisions (Frankel, Cohen and Deane, 1977) and to receive earlier and more frequent promotions and raises (Arthur D. Little, 1974; Hayes and Travis, 1976).

Employers also view the benefits of cooperative education as occurring during three stages (Arthur D. Little, 1974) which correspond with the three phases for students identified above: (1) preprofessional employment; (2) selection, orientation and

hiring, and; (3) permanent professional employment. During their cooperative education terms, students are perceived by employers as competent, highly motivated and career-oriented employees (Deane, Frankel and Cohen, 1978; Rooke, 1984). In the second stage, cooperative education experience helps move young adults into organizations by providing an effective system to select, train and recruit the most suitable candidates for full-time employment following graduation (Arthur D. Little, Inc., 1974). As permanent employees, former cooperative students are more immediately productive (Yensco, 1971) and are viewed with more regard than other new college hires (Frankel, Cohen and Deane, 1977) as is manifested by their more rapid progress up the company ladder (Wright, 1980). One company reported (Phillips, 1978) that cooperative education graduates are "well-trained and have exposure to the company that no other employees are able to get. When they return they adapt to the new job much faster...than the non co-op graduates."

Limitations of Research in Cooperative Education

Although the research in cooperative education has offered some important insights, it has been of limited usefulness because the focus has been on outcomes and the process by which outcomes have been obtained has been largely ignored. Indeed, research on experiential learning in general has been criticized (Moore, 1984) because it has tended to focus on outcomes and not examined the processes by which change has taken place. This problem has been exacerbated in cooperative education research

because typically findings have not been placed within a theoretical framework to provide a context for understanding why identified outcomes occur.

Another limitation of previous studies comparing graduates of cooperative and non cooperative education programs is that they have not examined an important variable likely to affect employee behavior, i.e., whether a graduate is working for a former cooperative employer or working for a new employer. The only study which has examined this variable was conducted in Australia (Gillin, Davie and Beissel, 1984) and found a positive relationship between amount of contact with one's full-time employer as an undergraduate cooperative student and level of responsibility on first job after college.

Another factor to consider in research on cooperative education is that diverse educational strategies have been grouped under the general term "cooperative education" (Wilson, Brown, Bork and Black, 1974). Characteristics that can vary from one program to another include goals, policies for awarding credit and involving teaching faculty and whether cooperative work is full-time or part-time. For example, a "traditional" program offers multiple terms of work experience and alternates terms of academic study with terms of full-time work. This kind of program is likely to have a very different effect than one which offers one or two terms of work experience scattered over a four year undergraduate program and whose goal is to enhance personal growth. A study of "cooperative education" which groups data from such diverse types of programs is less likely to

distinguish program processes and outcomes related to participation in cooperative education. The research presented here selected only graduates of traditional, career-oriented cooperative education programs which require at least four terms of cooperative education experience.

A final and very important consideration is that in the past, research in cooperative education has not been placed within the context of organizational behavior, which provide a different perspective than that of educators on experiences at work and what can affect those experiences.

The Research Problem

Twenty years ago, Schein (1964) decried the ineffective way that most employers had for "breaking in" their new college graduates. He proposed that a mechanism must be devised for the recent college hire to "come to terms with his supervisor, ... integrate himself into relevant groups within the organization, and learn the informal rules of the game." Almost ten years later, Dunnette, Arvey and Banas (1973) expressed concern over reports of a high incidence of early attrition among recently hired college graduates and reiterated suggestions made by Schein to alleviate this problem. More recently, Louis (1980) reported a "growing concern that current organization entry practices do not adequately ease the transition of new members into work organizations." It appears that the process of organizational entry for college graduates continues to be a serious problem which has not been adequately addressed.

Schein coined the phrase "organizational socialization" to describe the process by which new employees "learned the ropes" in an organization and defined it as "the process of being indoctrinated and trained, the process of being taught what is important in an organization." Subsequent research in the field of organizational socialization (Feldman 1976; Schein, 1978) has identified three stages to the socialization process. The first stage has to do with entry into the organization. One of the important concerns at this stage is how realistic a new employee's expectations are regarding his or her job. The second stage involves "breaking in" to the organization, becoming a functioning member of the organization. An important issue at this point is whether there is congruence between the needs and goals of the employee and the organization. Stage three has been designated as the "settling in" stage and signifies a transition from newcomer to insider. A manifestation of attainment of this level of socialization is demonstrating commitment to the organization.

Schein (1968) proposed that one way that schools can improve the socialization process is by inserting an apprenticeship experience into the curriculum. Cooperative education, which involves students in productive and career-related work as part of their undergraduate curriculum, may be viewed as similar to the apprenticeship experience proposed by Schein. The research cited above suggests ways that cooperative education facilitates the transition from academia into the workplace. It thus seems

reasonable to examine cooperative education as a means of organizational socialization to gain greater insight into how cooperative education affects behavior of recent college hires.

Initial Expectations

Researchers have found (Feldman, 1976; Stumpf and Hartman, 1984) that the amount of information an employee obtains about a job prior to organizational entry is significantly related to how realistic that prospective employee's expectations are about the new job. Louis (1980) suggest three reasons new employees have unrealistic exectations: (1) They are not gradually exposed to the organization and job have no way to confront their situation a little at a time, (2) Neither the organization nor the new employee understand the need to learn the "culture" of the organization, (3) the "individual experiences a change in role and often in professional identity, from student to financial analyst, for instance."

The approximately 40 percent of cooperative education graduates who remain full-time with a former cooperative employer have been gradually exposed to the organization and have developed some understanding of the organizational culture (Horn, 1971). As one employer states (Knarr, 1984), "When one of our co-op students graduates and agrees to accept an offer a full-time position, he or she makes that decision with full knowledge of the operation of the corporation." Even graduates who do not remain with a former cooperative employer benefit from their experience in job-seeking and feel better informed about full-time job opportunities than other college graduates (Brown,

1976). Further, all cooperative education students are used to making the transition from student to professional employee since they must do that many times during their undergraduate years.

H1: Cooperative education graduates, particularly but not only those who remain with a former cooperative education employer, have more realistic expectations about their first job after college than other new college hires.

Congruence of Job with Needs

Stumpf and Hartman (1984) tested a causal model of organizational socialization which predicted that new employees with realistic expectations were more likely to have jobs which are congruent with their needs. If cooperative education graduates have more realistic expectations about the jobs they accept, it is more likely they will choose jobs for which they are well-suited. Frankel, Cohen and Deane (1976) found that more cooperative education participants have first jobs after college which are relevant to their college experience and that former cooperative students continue to have a better match between their college experience and job requirements a few years after college than do other college graduates.

H2: Cooperative education graduates, particularly those who remain with a former cooperative education employer, have first jobs after college that are more congruent with their needs than those of other recent college graduates.

Relevance of Job to Career Plans

Graen, Orris and Johnson (1973) found that new employees who saw their work as relevant to their career plans were more successful at perceiving demands from organizational members and in adapting to these demands and also received more job information and had greater job latitude. Berwald (1983) found

that the extent newcomers expected their work to be relevant to future career plans was associated with greater fulfillment of pre-entry expectations.

Research on graduates of cooperative education programs suggests they are more certain about their career than other college graduates (Weinstein, 1980), more concerned that their first job after college be related to their field of study and more successful in finding jobs relevant to their undergraduate major (Brown, 1976; Frankel, Deane and Cohen, 1978). Graduates who remain with a former cooperative employer would be even more likely to feel their choice of job and organization is relevant to their career plans since they would have a better sense as to how relevant the job was before they accepted full-time employment.

H3: Cooperative education graduates, particularly those who remain with a former cooperative education employer, have jobs that are more relevant to their career plans than other recent college graduates.

Organizational Commitment

A number of studies, summarized in Wanous (1980), have identified organizational commitment as a signpost of successful socialization, i.e., that an employee has moved from "outsider" to "insider". Cooperative education graduates working full-time for a former cooperative employer will have had the opportunity prior to graduation to learn the organization's goals and values. Their acceptance of full-time employment implies they have accepted those organizational goals and values and have manifested a desire to maintain membership in the organization. Even those cooperative education graduates who have selected new

employers should be more committed to their organizations than other new college hires. If, as has been suggested above, cooperative education experience moves a person more successfully through the previous stages of socialization, it is likely that they will be more committed to the organization as well.

- H6: Cooperative education graduates, particularly those who remain with a former cooperative employer, are more committed to the organization than other college graduates.
- H7: Employees with more realistic expectations upon entering an organization and who feel their jobs are congruent with their needs and relevant to their career plans are more likely to express commitment to the organization.

Employee Power

Feldman (1976) found that "one of the most frequently cited indicators of ineffective socialization is lack of influence" an employee has in his or her job. He also found that having realistic expectations at the start of one's job was directly and significantly related to "mutual influence", i.e., the extent to which individuals feel some control or power over the way work is carried out in their departments. VanMaanen and Schein (1979) report that typically newcomers to an organization remain "'on the edge' of organizational affairs for some time after entrance." As such, they are less likely to have a say in group activities or to understand the organizational norms. Louis agrees (1980) that newcomers, particularly college graduates on their first job after college, are excluded from the mainstream and have little influence or information access on their jobs.

Kanter, in her organizational case study of a Fortune 500 corporation (1978), defined power as the "ability to get things done". Powerful people have access to the resources they need to do their jobs and participate in decision-making. Kanter's model of power clearly describes the outcomes of socialization described above. It thus seems reasonable to hypothesize that the more successful the socialization process, the more powerful the employee.

If cooperative education graduates, particularly those who remain with a former cooperative employer, experience more successful socialization, it is likely they will also be more powerful employees within the organization. Although this possibility has not been studied before, there are a few isolated findings which lend credibility to this line of reasoning. Frankel, Cohen and Deane (1977) found that significantly more cooperative education graduates indicated their bosses often ask their opinions on work-related matters than did the graduates without cooperative education. Further, findings that employers express greater confidence in the work and promotability of former cooperative employees are consistent with the possibility of their having more involvement in decision-making and greater access to the resources necessary to do their job.

H8: Cooperative education graduates on their first full-time job after college, particularly those who remain with a former cooperative education employer, are more involved in decision-making and have greater access to resources than other college graduates.

H9: New employees who have been successfully socialized to the organization, i.e., have realistic expectations, are in a job that is congruent with needs and relevant to career

plans, and have become committed to the organization, are more powerful employees than those who are less socialized.

METHODOLOGY

Sampling Procedures

The population of interest was cooperative education (CE) and non cooperative education (NCE) graduates working on their first full-time job since graduation from their baccalaureate degree programs. Only those employees who had been working for three years or fewer were studied since it was expected that the more time that passes since graduation, the more likely that experiences other than undergraduate education influence employee behavior. The entire sample of employees came from one company in order to reduce the variance resulting from diverse organizational environments. The company, a large employer of CE students and graduates, was able to provide work addresses of their college hires, including year of graduation, and were able to sort their employee list according to undergraduate institution. This made it possible to select a sample which included graduates of both CE and NCE programs who had graduated within the past three years.

A total of 476 names and mailing addresses of baccalaureate graduates were identified. The sample included 213 graduates from mandatory CE programs, 211 graduates from optional or selective CE programs and 52 graduates from NCE programs. Although there was no way to know the exact proportion of CE alumni from the optional/selective programs, i.e., where CE

participation is not required, a reasonable guess was that half of the alumni would have had CE experience. This meant the sample would include approximately 300 CE graduates and 150 NCE graduates. Given research (cited earlier) which has shown that close to 40 percent of CE graduates work for a former CE employer after graduation, this suggested a sampling distribution of approximately 150 individuals for each of the three levels of the CE status variable.

Questionnaire Development

The questionnaire was designed to be self-administered and closed-ended. It included a number of questions created for this research to gather factual information, e.g., whether the respondent had participated in cooperative education. However, each of the socialization and power variables was measured using scales developed by other researchers. These scales, described below were chosen because of their acceptability within the field of organizational behavior and consistent reports of acceptable reliability.

Initial Expectations

Expectations upon entering the organization were measured using a 3-item scale developed by Feldman (1976) to study stages of organizational socialization and used more recently by Stumpf and Hartman (1984). This scale retrospectively assessed how realistic or accurate expectations of the job were when an employee first began to work for a company.

Job Congruence

The two-item scale used to assess job congruence was also developed by Feldman (1976) and used by Stumpf and Hartman (1984). This scale measures the congruence between the needs of the employee and the requirements of the job.

Job Relevance

Job relevance was measured by a six-item scale developed by Berwald (1983). The scale was designed to assess employees' perceptions of the relevance of their jobs to their career plans.

Organizational Commitment

This variable was assessed by the shortened nine-item version of Porter and Smith's (1970) Organizational Commitment Questionnaire (OCQ). This scale is designed to measure the "strength of an individual's identification with and involvement in a particular organization" (Mowday, Steers and Power, 1979).

Access to Resources

One of the two aspects of employee sense of power that socialization was hypothesized to affect was degree of access to resources necessary to do one's job. The scale selected to measure access to resources was Quinn and Staines' (1979) Adequacy of Resources scale. This is an eleven-item scale rated on a four-point scale from "not at all true" to "very true".

Participation in Decision-Making

The measure chosen to assess the second aspect of employee power was a scale developed by Vroom (1960) to rate the amount of

influence a person perceives him or herself to possess on the job. The scale is comprised of four items with a five-point response choice from "never true" to "always true".

Data Collection

Although the sampling unit was the employer, the source of data and the unit of analysis was the employee. Data were obtained through the survey questionnaire which was mailed to employees at their work address. Questionnaires were mailed to the 447 employees for whom addresses were available and of these, 417 were deliverable. After two follow-ups, 315 responses were received yielding a response rate of 75.5 percent.

Methods of Data Analysis

Path analysis was chosen as the method to examine the chain of predicted relationships and to identify both direct effects as well as indirect effects of one variable on another through intervening variables. It is a method of analysis which can "shed light on the tenability of a causal model formulated by the researcher" (Pedhazur, 1982). The causal model being tested here leads from CE participation through the stages of socialization to employee power. Although the choice of an ex post facto design restricts the conclusions that can be drawn about the causal paths that were hypothesized, the results can provide evidence to test the predictive ability of the model and suggest revisions to it. Since the model posed here has not been explored before, the findings of this research can set the stage for a longitudinal study to test causal paths suggested by the findings of this research.

FINDINGS

The final sample included 225 employees on their first full-time job after college. Using the screening items on the questionnaire, 90 of the 315 questionnaires received were eliminated because they were inappropriate for this study, e.g., not on first job after college. The three levels of CE participation were distributed in the sample as follows: CE graduates who remained with a former employer, n=49; CE graduates who worked for a new employer, n=65, and; graduates with no CE experience, n=111. Although this was not the even distribution of cases among the three CE status groups which was sought in the research design, there were a sufficient number of cases in each level to permit data analysis. Further, the contrast coding vectors created for use in the path analysis adjusted for the uneven group sizes.

The observed correlation coefficients which served as the basis for the path analysis appear in Table 1. They also appear under the column labeled "r" in Table 2, where this correlation is decomposed into direct, indirect and spurious paths. The discrepancy between the observed correlations below and those predicted by the path model also appear in Table 3 as the residual correlations.

Table 1
Correlations Among Variables in Path Analysis

Variables	1	2	3	4	5	6	7	8
1. CE	1.00							
2. CE vs. NCE	.00	1.00						
3. Expectations	.20	.34	1.00					
4. Congruence	.04	.06	.27	1.00				
5. Relevance	.08	.12	.24	.54	1.00			
6. Commitment	.06	.09	.33	.43	.45	1.00		
7. Resources	-.05	.07	.23	.32	.39	.47	1.00	
8. Participation	-.01	.03	.21	.38	.35	.39	.52	1.00

The results of the path analysis, depicted in Table 2 and illustrated in Figure 1, offer partial support for the research hypotheses and the theoretical model. The hypothesized relationships between CE participation and early expectations (Hypotheses 1 and 2) were supported by the path analyses results. Both contrast vectors were significant predictors of early expectations. The path from vector 1, which contrasts CE graduates who remain with a former employer with those who move on to new employers, to early expectations (p31) was .20. The path from vector 2, which contrasts CE and NCE graduates, to early expectations (p32) was .35, an even stronger predictive path. These data are consistent with the first stage of the model, which proposes that participation in cooperative education predicts realism of early expectations upon entering a full-time job after college and that this effect is enhanced when a CE graduate remains with a former CE employer.

No other direct paths from vectors 1 or 2 to any of the socialization or power variables were found to be significant. Thus, hypotheses 2, 4, 6 and 8, which linked CE participation directly to each of the other socialization variables and to the power variables, were not supported by the data. Although all the indirect paths from vectors 1 and 2 to the socialization and power variables were significant the magnitude of the indirect effects is not striking.

Table 2
Summary of Effects Hypothesized in Model

Path	Direct	Indirect	Spurious	r	Residual
CG-Exp(p31)	.20*	.00	.00	.20	.00
C-NC-Exp(p32)	.34**	.00	.00	.34	.00
CG-Congr(p41)	-.02	.06	.00	.04	.00
C-NC-Congr(p42)	-.04	.10	.00	.06	.00
Exp-Congr(p43)	.29**	.00	-.02	.27	.00
CG-Relv(p51)	.03	.05	.00	.08	.00
C-NC-Relv(p52)	.04	.07	.00	.12	.00
Exp-Relv(p53)	.22**	.00	.02	.24	.00
CG-Commit(p61)	.03	.03	.00	.06	.00
C-NC-Commit(p62)	.04	.05	.00	.09	.00
Exp-Commit(p63)	.00	.14	.02	.33	.17
Cong-Commit(p64)	.28**	.00	.02	.30	.00
Relv-Commit(p65)	.29**	.00	.03	.45	.14
CG-Resc(p71)	-.08	.03	.00	-.05	.00
C-NC-Resc(p72)	.02	.04	.00	.07	.00
Exp-Resc(p73)	.00	.07	.00	.23	.16
Cong-Resc(p73)	.00	.13	.01	.32	.18
Relv-Resc(p75)	.00	.14	.01	.40	.25
Commit-Resc(p76)	.47**	.00	.00	.47	.00
CG-Part(p81)	-.04	.03	.00	-.01	.00
C-NC-Part(p82)	-.01	.04	.00	.03	.00
Exp-Part(p83)	.00	.06	.00	.21	.15
Cong-Part(p84)	.00	.11	.01	.38	.27
Relv-Part(p85)	.00	.11	.01	.35	.23
Commit-Part(p86)	.39**	.00	.00	.39	.00

*p < .01

**p < .001

The data provide evidence to support hypotheses 3 and 5: realism of expectations upon entering the organization was a significant predictor of congruence of jobs with needs ($p43=.29$) and of relevance of job to career plans ($p53=.22$). These findings are consistent with those of Berwald, (1983), Feldman (1976) and Stumpf and Hartman (1984). They emphasize the importance of having accurate pre-job information and realistic expectations so that there is a better chance prospective employees will choose a job and organization which matches their needs.

The data also lend some support to the notion that expectations, through their effect on congruence and relevance, lead to greater commitment to the organization. The indirect path from expectations to organizational commitment ($p63$) was found to be .14. This chain of causal paths, from expectations (stage 1) to congruence and relevance (stage 2) to commitment (stage 3), is consistent with the three-stage socialization model being tested in this research. Thus, the data support the hypothesized relationships among the socialization variables.

Hypothesis 9, which referred to the next stage of the model, examined the direct causal path from the outcome of socialization, organizational commitment, and the indirect paths from the earlier socialization variables, expectations, congruence and relevance, to the two components of power. The path to access to resources from organizational commitment ($p76=.47$) was very strong. Organizational commitment was also a strong predictor of participation in decision-making ($p86=.39$).

These findings are consistent with the theoretical model and with the literature which suggests that ineffective socialization results in employees who have reduced access to resources and less participation in decision-making. They differ from the Stumpf and Hartman (1984) model, however, which found support for a causal path in the opposite direction: the extent to which an employee feels he or she influences aspects of the job and work unit is a significant predictor of organizational commitment.

The causally prior socialization variables indirectly affected access to resources and participation in decision-making. Congruence and relevance had approximately equal effects, with a path to access to resources of .14 and to participation in decision-making of .11. The effect due to expectations was diminished since it was twice-removed from the power variables. The path from expectations to resources (p73) was .07 and the path to participation (p83) was equal to .06.

Figure 1

A Path Analysis of the Process and Outcomes of Organizational Socialization through Cooperative Education

CG-Stay vs CG-Go	CG vs NCG
.20	.34
Expectations	
.29	.22
Congruence	Relevance
.28	.29
Commitment	
.47	.39
Resources	Participation

The residual correlations, which appeared in the last column of the decomposition table, are presented in a residuals correlation matrix in Table 3. Examination of the residuals in this format makes it clear that although many of the hypothesized paths are significant, the model does not satisfactorily reproduce the correlations matrix beyond the third variable entered into the model, i.e., expectations. One major reason for the discrepancy between observed and predicted correlations is that the model does not take into account the strong correlations between Congruence and Relevance and between Resources and Participation since the theoretical model places the two socialization variables on the same causal level and the two power variables on the same causal level.

Table 3
Residuals Correlation Matrix

Variables	1	2	3	4	5	6	7	8
1.CG								
2.CG vs NCG	.00							
3.Expectations	.00	.00						
4.Congruence	.00	.00	.00					
5.Relevance	.00	.00	.00	-.48				
6.Commitment	.00	.00	.00	-.35	-.37			
7.Resources	.00	.00	-.07	-.23	-.16	-.10		
8.Participation	.00	.00	-.05	-.15	-.19	-.12	-.37	

CONCLUSIONS AND IMPLICATIONS

The findings of this research support the proposition that CE participants have significantly more realistic expectations about their first job after college than other recent college graduates. Although the reasons for this were not explored in this study, other research suggests (Brown, 1976; Wilson and Lyons, 1961) that CE graduates have better information about their careers and the workplace in general and more job-seeking skills than NCE graduates. This research also found that CE graduates who remained with their former CE employers were most likely to have realistic expectations. This is likely due to the fact they had the additional advantage of having accurate information about the job and organization (Phillips, 1978; Wanous, 1980) before they accepted full-time employment. This path from obtaining accurate pre-job information to having more realistic expectations parallels the path model supported by Stumpf and Hartman's (1984) research.

These findings are important for a number of reasons. First, they suggest that CE graduates who remain with a former CE employer have different experiences at work on their first full-time job after college than CE graduates who choose to work for a new employer. Since past research in CE has not examined these two groups separately, the findings suggest that subsequent research could provide richer data by comparing experiences for these two groups. Second, the findings support the notion that a better understanding of the outcomes of CE experience in the workplace can be gained by using organizational behavior theory.

Third, they add to the knowledge about cooperative education by providing evidence that CE participation can be linked to a specific first job experience, having realistic expectations, which are unlike those experiences by other college graduates.

The results of this study also provide a theoretical context for future research on how CE participation may lead to realistic expectations. Such information would be helpful to educators as they seek to structure CE and other programs to help college graduates make a successful transition into the workplace. If there are particular information-seeking skills that could be taught, such skills would be useful throughout graduates' careers, as they move from one position or organization to another. Stupf and Hartman's (1984) research results suggested that individuals' career management and exploration activities are central to understanding the processes that lead to organizational commitment or withdrawal. Thus, better understanding of the exploration activities CE students experience may also provide useful information to organizations as they seek to improve the process of organizational entry and reduce turnover.

The findings that CE experience does not directly predict any of the socialization outcomes besides expectations was surprising, given the theoretical basis of this research. The path analysis results suggest that, on the average, CE graduates have more realistic expectations than NCE graduates. For those CE graduates with more realistic expectations, the rest of the socialization process proceeds more favorably as well. However, for the CE graduates who do not demonstrate more realistic

expectations, there is no other direct positive link to either the socialization or power variables studied here. Thus, the critical link in this causal chain for the CE graduate is initial expectations. If CE experience does not exert an influence at this stage, it does not seem to have any independent effects on any of the latter stages of socialization or on the hypothesized outcomes of socialization.

This latter statement may have broader implications. It is possible and worth exploring whether the effects of CE participation diminish over time. In other words, is the reason that CE participation related significantly to initial expectations but to other variables because the effects of CE are strongest at the point of organizational entry and decrease thereafter? Subsequent studies may wish to investigate additional variables, such as turnover, that would tie in with the theoretical model tested here. Turnover would be a particularly useful variable to study since some research in cooperative education (Wright, 1980) suggests CE graduates who work for former CE employers have lower turnover rates than other comparable hires.

Another issue raised by this research is whether the findings about cooperative education for this sample would occur in programs which have different approaches to cooperative education than the "traditional" model of CE studies here. For example, this research sample was chosen to include only graduates of structured career-oriented CE programs which alternated multiple terms of full-time experience with classroom

study. Would graduates of parallel CE programs, whereby students have part-time rather than full-time work experience, report more realistic expectations on their first job after college, assuming the other program characteristics were similar? Is there something about being viewed as a full-time employee that yields unique benefits? It would be useful to explore the generalizability of the findings of this research to other kinds of CE or experiential learning programs.

Although the focus of this study was on the relationship of CE participation to socialization to an organization and power within that organization, the causal model proposed linkages not previously explored in socialization literature, i.e., the linkage to power as defined by Kanter. The steps in the causal model linking socialization and power received mixed support. Although the data indicated the socialization and power variables were significantly related, the direction of the relationships was ambiguous. The results showed that realistic expectations was an important variable which was directly linked to congruence of job to needs and relevance of job to career plans and indirectly linked to commitment as well as to participation and access to resources. This finding is consistent with the socialization literature (Feldman, 1976; Stumpf and Hartman, 1984; Wanous, 1980) and emphasizes the importance of beginning a job with an accurate understanding of both the job and the organization. However, the causal order beyond that point is not clear based on the path analysis findings. More specifically, the causal relationships among commitment to the organization,

participation in decision-making and access to resources requires further examination. It may be that a causal model is inappropriate for these variables and that a model which allows for interaction and reinforcement would more accurately capture the true situation. The ambiguity regarding the causal direction does not lessen the importance of discovering that the socialization and power variables were significantly related.

Significance of the Study

Over 180,000 students currently participate in CE programs (Cooperative Education Research Center, 1984). It is likely this figure will increase substantially in the near future as a result of an Advertising Council project scheduled to start in 1985 to promote cooperative education throughout the country with a high visibility television and print campaign. Since cooperative education serves so many students and has the potential to serve many more in the future, it is important to conduct research which may strengthen this form of education. Future studies can build on this research to discover why some CE graduates have more realistic expectations than others and, perhaps, implement program changes to help encourage a realistic entry into the workforce. These findings would be of particular value given the importance of realistic expectations in predicting desirable outcomes, such as choosing a job that matches one's needs. In addition, employers may also be interested in the findings of this research. Since the findings lend support to the importance of realistic information about jobs, careers and organizations prior to organizational entry, employers may wish to consider

ways, including implementation of CE programs, to improve this aspect of their hiring practices. Greater attention to the pre-entry stage in the hiring process may reduce the problem of early attrition among recently hired college graduates.

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