

Locus of Control, Organizational Climate, and Participation in Staff Development: A Study of College Instructors

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ABSTRACT

This study identifies some factors affecting community college instructors' participation in staff development activities. Social learning theory suggests that both situational and personal factors explain the behaviour of individuals. Consequently, a theoretical model explaining staff development participation rates was developed, and tested on community college instructors. Sex, academic attainment, college teaching experience, locus of control, and perception of organizational climate, were included as independent variables. In addition, locus of control, and perception of organizational climate, were considered as intervening between these variables and staff development participation rates. The results illustrated that college teaching experience, and perception of administration climate, which is one aspect of organizational climate, were the most important determinants of staff development participation rates. This suggests that administrators play a key role in determining staff development participation rates, first by making the funds available that enable staff to access staff development opportunities, and second by establishing an administrative and reward structure that encourages and facilitates continuous enhancement of instructors' skill levels.

RÉSUMÉ

Cette étude met en lumière quelques-uns des facteurs qui influent sur le désir de participation des enseignants aux activités de perfectionnement professionnel. La sociologie de l'apprentissage montre que le comportement des individus s'explique à la fois par la situation donnée et par des facteurs purement personnels. En conséquence, nous avons établi un modèle théorique visant à définir les niveaux de participation du personnel à son perfectionnement professionnel, puis nous l'avons appliqué à des enseignants de collèges communautaires. On trouve dans

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ce modèle diverses variables telles que le sexe, le niveau d'études, l'expérience en enseignement postsecondaire, la source de détermination et la façon dont les enseignants perçoivent l'organisation de leur établissement. Par ailleurs la source de détermination et la façon dont les enseignants perçoivent l'organisation de leur établissement ont été considérés comme des facteurs capables de jouer sur le taux de participation aux activités de perfectionnement professionnel. Les résultats ont permis d'établir que l'expérience en enseignement au niveau postsecondaire et la façon dont l'enseignant perçoit l'administration de son collège (ce qui est l'un des aspects de l'organisation) sont les deux facteurs les plus importants de leur participation. Ceci montre que les administrateurs de l'institution jouent un rôle clé pour encourager les enseignants à participer à ces activités, d'une part en attribuant les fonds nécessaires à la mise en place de telles activités et d'autre part en créant un système de récompenses susceptibles d'encourager les enseignants à se perfectionner toujours davantage et de leur rendre ce perfectionnement plus facile.

The staff development movement emerged in Canada and the United States in the early 1970's, as educational administrators attempted to deflect public criticisms of the post-secondary educational sector (Campbell, 1977; Centra, 1978; Konrad, 1983; Nelsen, 1983). In Canada, these criticisms arose in part from disappointment with the results that had emanated from the expansion of the post-secondary educational sector in the previous decade. At that time, a community college system, geared toward vocational training, was created, in the expectation that this would allow Canadians to meet the labour market needs of a rapidly evolving technological society, without having to import skilled workers from other countries (Dennison, 1984).

When dislocations in the labour market persisted, concerns were voiced about the quality of instruction in colleges and universities, the non-responsiveness of these institutions to changes in the marketplace, and their reluctance to incorporate new knowledge about adult learning, human development, and instruction into classrooms (Campbell, 1977; Dennison & Gallagher, 1986; Konrad, 1983). In response to demands for greater institutional accountability and flexibility (Parliamentary Task Force On Employment Prospects For The Eighties, 1981), and assurances of some advocates that staff development would enhance instructional excellence (Blackburn & Baldwin, 1983; Dillon-Peterson, 1981; Kozoll & Moore, 1979), administrators began allocating additional funds to staff development, knowing that the major resources available to them were the instructors. It was reported that the effectiveness of the initiatives was diminished, however, because of the low morale of the faculty, and the non-involvement of many of the instructors in greatest need of improvement. In addition, the outcomes of these staff development efforts were disappointing in terms of participant satisfaction and long-term program effectiveness (Gaff & Morstain, 1978; Siegel, 1980).

When the positive results that had been expected from these staff development initiatives failed to materialize, explanations for faculty resistance and the short-term impact of these programs were sought. Reasons put forward for faculty resistance were numerous: instructors did not recognize the need for better instruction; they were pessimistic about the outcomes of staff development programs; they did not feel that staff development efforts were geared to their needs; the organization did not demonstrate a clear commitment to staff development; and the necessary technical and social supports did not exist (Gaff, 1978; Group For Human Development in Higher Education, 1974; Nelsen, 1980; Schuster, 1985). In one case, it was suggested that the organizational structure was responsible for low faculty participation (O'Connell, 1983), and in another that an examination of the organizational environment might be helpful in explaining the short-term impact of these programs (Toombs, 1983). However, little effort was made to assimilate or reconcile the contradictory explanations for the success and/or failure of programs, or to develop and test models that explained the prerequisites of successful staff development programs.

The failure to examine the determinants of program success and failure empirically was not the only problem with this research. There was also a tendency among researchers to address questions about the effectiveness of various staff development activities to the persons in charge of staff development, rather than to the instructors themselves, and as O'Connell (1983) pointed out, administrators' perceptions and those of instructors were apt to be very different.

Despite these problems, it was clear that attention had to be directed toward the prerequisites of effective staff development programs if the effectiveness of these programs was to be improved. It was argued that one of these prerequisites was the instructors' willingness to participate in such programs. Identifying the factors that influenced that decision, from the instructors' viewpoint, was the intent of this study.

THE MODEL

A social-psychological perspective is used to identify the variables that affect staff development participation rates (Clark et al., 1986; Mead, 1934). Social learning theory acknowledges that personal characteristics have a major impact on behaviour, but situational factors are important as well (Perry, 1980; Verma, 1984; Williams et al., 1974). Since the behaviour being examined occurs within an organizational setting, it is therefore necessary to consider how organizational rules, rewards, and structures affect behaviour. Consequently, both psychological and organizational variables are considered in arriving at an explanation of staff development participation rates. The literature suggests that the climate of the organization is an important factor in the explanation of staff development participation rates. Individual autonomy and responsibility, the degree of structure imposed on the position, reward orientations, and consideration, warmth and support from managers and peers, constitute some of the dimensions of organizational climate (Clark et al., 1985). For purposes of this study, an

administrative and social aspect of organizational climate have been identified. The administrative aspect encompasses the task orientation of the institution, whereas the social aspect encompasses the warmth and supportiveness of the institution.

It has been argued that unsupportive administrators, peer pressure to conform to the status quo, inadequate communication, and unclear goals, reduce staff development participation rates (Bergquist & Shoemaker, 1976; Clark & Corcoran, 1985; Culver & Hoban, 1973; Duttweiler, 1986; Fullan et al., 1980). An additional factor often cited is that low priority is given to instructional excellence in tenure and promotion decisions (Chait & Gueths, 1981; Konrad, 1983). Identifying the determinants of staff development participation rates is important, because there is general agreement that staff development is needed to support any change effort by providing the "training, motivation, resources and information" needed to carry through on change initiatives (Group For Human Development In Higher Education, 1974, p. 16). There is some evidence that organizational climate may determine whether staff development efforts *can* produce changes in behaviour that will contribute to organizational effectiveness (Wexley & Latham, 1981).

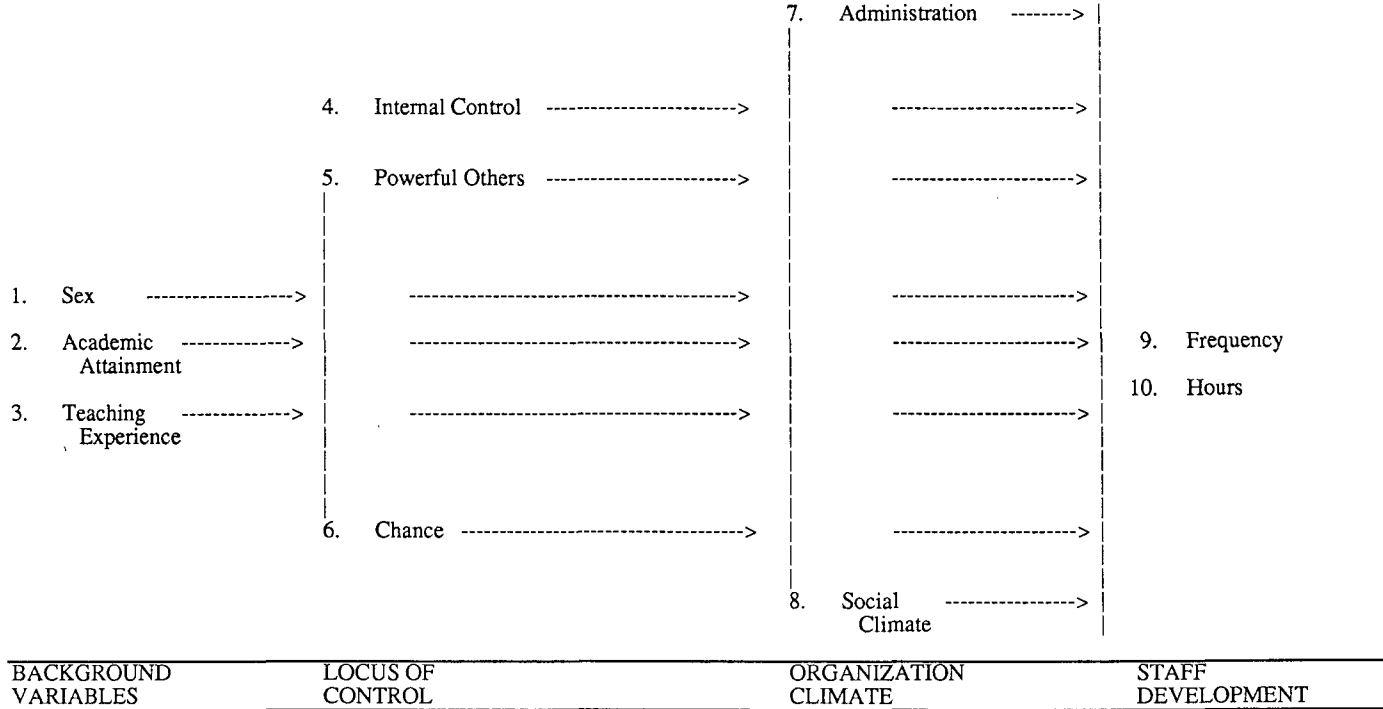
While organizational factors may be important, social learning theory also suggests that the individual's expectations, past experiences, values, attitudes and beliefs (Petri, 1981), affect behaviour as well. Consequently, any effort to explain existing behaviour, or to change behavior, must begin from a determination of the underlying attitudes, expectations, perceptions, and motivations. With respect to motivations, one theory suggests that the force behind human behaviour is the need to be effective in controlling one's environment (Petri, 1981). Previous studies have indicated that a construct associated with this theory, the locus of control, might be an important determinant of staff development participation rates.

The locus of control is a generalized expectancy regarding the source of reinforcement for behaviour, and it is considered to be a relatively permanent dimension of personality. Some individuals attribute their rewards to factors external to themselves, such as luck, chance, fate, or powerful others. In this study, individuals who believe that the rewards they receive are attributable to luck, chance, and fate are designated as having a belief in chance, while those who attribute their rewards to powerful others are designated as having a belief in powerful others. Both belief in chance and belief in powerful others are considered to be external orientations, and the holders of these beliefs are known as externals. As alternative orientation is an internal one, whereby individuals attribute their rewards to their own behaviours, or to relatively permanent characteristics within themselves. Such individuals are known as internals, and in this study, they are designated as having a belief in internal control.

Research studies indicate that locus of control intervenes between other variables to affect complex behaviour patterns (Naditch & DeMaio, 1975; Saltzer, 1981; Weiner et al., 1972; Wolk & DuCette, 1973). There has been speculation that locus of control might affect staff development participation rates (Rotter &

FIGURE 1

The Theoretical Model



Mulry, 1965; Sistrunk, 1986), but this has never been confirmed. In addition to organizational climate and locus of control, background variables associated with locus of control were also examined in this study, including sex, academic attainment, and college teaching experience. It is argued that these background variables have direct effects upon all other variables in the study.

A model illustrating the relationship between the background, locus of control, organizational climate, and staff development participation variables is presented in Figure 1.

In this figure, variables on the left are assumed to be causes of all variables on the right. For example, sex is assumed to be a cause of internal locus of control, perception of administration climate, and participation in frequency activities. In addition, locus of control intervenes between the background and organizational climate variables, and between the background and staff development participation variables. Finally, perceptions of organizational climate intervene between the effects of the locus of control on staff development participation rates.

METHODOLOGY

The Sample

The population for this study consisted of all full-time instructors at Red River Community College in Winnipeg, Manitoba. The study took place in the Spring of 1988, when questionnaires containing measures of organizational climate, locus of control, staff development participation rates, and demographic variables, were distributed to approximately 400 instructors.

The data request was sent out initially in late March, and subsequent follow-up letters were sent to non-respondents in late April and mid-May. In total, 171 responses (43 per cent) were received. Approximately 65 per cent of the respondents were male, and most of them had 16–25 years of college teaching experience. Of these male respondents, 64 per cent had university degrees, most typically at the undergraduate level. Sixty-five per cent of the females who responded had 10 years or less of college teaching experience, and 90 per cent of them had university degrees, typically at the undergraduate level.

The Variables

As noted in Figure 1, ten variables were used in this study.

Staff Development. Previous studies had defined approximately 45 separate staff development activities (Centra, 1976; Konrad, 1983; Toombs, 1985). For purposes of this study, these activities were organized into two meaningful categories: those which concerned participation in formal programs which were sanctioned by administrators; and those which involved individual efforts, such as reading. Instructors were asked to estimate how often they performed each of 30 staff development activities. Their responses were factor analyzed, and items that loaded, with factor loadings of at least .30, on either of two factors, were

aggregated, resulting in the creation of two scales. These scales, "Frequency", and "Hours", measured participation rates for the formalized and individual programs, respectively. Sixteen items were included in the Frequency scale, and eight items in the Hours scale. Alpha reliability coefficients generated for the two scales were .82 and .80, respectively.

Organizational Climate was measured using a modified version of the short-form Organizational Climate Index developed by Richman and Stern (1975). For this study, the 80 items in the short-form instrument were reduced to 30, and modified to shorten the questionnaire, and improve the clarity of the questions. For example, the statement "People here spend a great deal of time thinking about and discussing complex problems", was modified to read, "People spend a great deal of time discussing complex problems."

The organizational climate data were factor analyzed (Ferguson, 1981), and two dimensions of organizational climate were identified: the "Administration Climate", which measured the perceived degree to which the workplace facilitated the achievement of work goals, and the "Social Climate", which measured the perceived degree to which the workplace supported personal need satisfaction. Each scale consisted of 10 items, and alpha reliability coefficients for the two scales were .86 and .73, respectively.

Locus of Control was measured using Levenson's IPC Scale. The I Scale measured the extent that individuals believed they had control over their own lives. The P Scale measured the extent that individuals felt powerful others controlled their lives. The C Scale measured the extent that individuals attributed outcomes to luck or fate. On the basis of factor analyses, 7 items which loaded on the internal control scale, 7 items which loaded on the powerful others scale, and 9 items which loaded on the luck or fate scale, were identified. These scales are referred to in Figure 1 as, "Internal Control", "Powerful Others", and "Chance", respectively. Their alpha reliability coefficients were .69, .78, and .77, respectively.

Background Variables were collected in the final section of the questionnaire. In some cases, the data were recoded to permit analysis. For sex, males were coded "1", and females "2". Three categories of academic attainment were defined, ranging from attainment of "less than a Bachelor degree", coded "1", to "completion of a Master or Doctoral degree", coded "3". Five categories of college teaching experience were created, consisting of 1-5 years, 6-10 years, 11-15 years, 16-20 years, and 21-25 years. These were coded "1", "2", "3", "4", and "5", respectively.

RESULTS

The correlation matrix for the ten variables is presented in Table 1. The correlation coefficients were calculated on the basis of pairwise deletion of missing values. In this table, it is evident that moderately positive correlations are found between the background variables, particularly sex and college teaching experience, and the organizational climate variables; and between the organizational climate variables and staff development participation rates. Weak to moderate negative correlations

Table 1
Pearson Product Moment Correlation Matrix for the Variables

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Sex	1.000									
2. Academic Attainment	.115	1.000								
3. Years Teaching	-.396***	.081	1.000							
4. Internal Control	.117	-.041	-.240***	1.000						
5. Powerful Others	-.201**	-.012	.008	-.256***	1.000					
6. Chance	-.149*	.011	.055	-.302***	.646***	1.000				
7. Administration Climate	.244**	-.051	-.260**	.223**	-.238**	-.175*	1.000			
8. Social Climate	.260***	-.040	-.237**	.234**	-.235**	-.194**	.700***	1.000		
9. Frequency	.107	-.036	-.070	.072	-.109	-.042	.317***	.221**	1.000	
10. Hours	.128*	-.078	-.264***	.084	-.090	-.044	.189*	.178*	.381***	1.000

* $p < .05$

** $p < .01$

*** $p < .001$

exist between the background and locus of control variables, with the exception of belief in internal control; and between college teaching experience and hours. Overall, the climate factors have the strongest relationship with frequency activities, whereas teaching experience has the strongest relationship with hours activities.

In Table 2, the standardized and unstandardized regression coefficients and R^2 are presented, to show how the background, locus of control, and organizational climate variables affect staff development participation rates. Regression coefficients are reported for both reduced-form (columns 4,6,8,9,11,12), and fully recursive analyses (columns 1,2,3,5,7,10,13). This allows both the total and indirect causal effects of the background, locus of control, and organizational climate variables on staff development participation rates to be determined (Alwin & Hauser, 1975). In the regression analysis, missing values were deleted on a pairwise basis.

Initially, the effect of the background variables on locus of control was determined (columns 1 to 3). The first significant finding was that belief in internal control was negatively related to college teaching experience ($-.226, p < .01$), indicating that more experienced instructors had a lesser sense that they determined the rewards they received, than did the less experienced instructors. The second significant finding was the negative relationship between sex and belief in powerful others ($-.239, p < .01$), which indicated that female instructors had less tendency to believe that powerful others controlled their lives than did male instructors. Surprisingly, the background variables explained 5.9, 4.7, and 2.3 per cent respectively, of the variance in belief in internal control, powerful others, and belief in chance.

The effect of the background variables on organizational climate was then determined. Moderate positive relationships between sex and perception of administration and social climate were found (.177, n.s. and .206, $p < .05$, respectively), along with moderate negative relationships between college teaching experience and perception of administration and social climate ($-.185$ and $-.151$, respectively). These findings indicated that female instructors, and those with less teaching experience, tended to view organizational climate more favorably than male and more experienced instructors. The background variables explained 9.4 and 9.2 per cent, respectively, of the variance in perceptions of administration and social climate.

When the intervening effect of locus of control was included, the amount of explained variance in administration and social climate rose to 14.9 and 14.7 per cent, respectively. Moderate negative relationships between college teaching experience and perceptions of administration and social climate continued to be evident ($-.175$ and $-.134$, respectively), as did moderately positive relationships between sex and perceptions of administration and social climate (.130 and .162, respectively).

Table 2
Standardized and Unstandardized Regression Coefficients for the Effect of All
Variables on Staff Development Participation Variables ¹

Variables	Internal Control	Powerful Others	Chance	Administration Climate		Social Climate		Frequency			Hours		
	1	2	3	4	5	6	7	8	9	10	11	12	13
Sex	.031 (.286)	-.239** (-3.386)	-.156 (-2.301)	.177 (1.838)	.130 (1.353)	.206* (1.030)	.162 (.810)	.102 (2.033)	.081 (1.619)	.042 (.835)	.039 (1.168)	.019 (.560)	.000 (-.028)
Academic Attainment	-.026 (-.173)	.023 (.232)	.030 (.313)	-.056 (-.411)	-.049 (-.359)	-.051 (-1.180)	-.043 (-1.53)	-.046 (-1.650)	-.044 (-1.621)	-.029 (-1.412)	-.063 (-1.352)	-.062 (-1.324)	-.055 (-1.191)
Years Teaching	-.226** (-1.747)	-.089 (-1.452)	-.009 (-0.047)	-.185 (-1.689)	-.175 (-1.651)	-.151 (-1.271)	-.134 (-1.241)	-.026 (-1.188)	-.027 (-1.195)	.026 (.186)	-.243** (-2.638)	-.252** (-2.736)	-.231 (-2.508)
Internal Control					.119 (.134)		.135 (.073)		.042 (.090)	.006 (.012)		.004 (.013)	-.013 (-.042)
Powerful Others					-.189 (-1.138)		-.152 (-1.054)		-.124 (-1.174)	-.066 (-1.093)		-.117 (-1.248)	-.093 (-1.199)
Chance					.013 (.009)		-.023 (-1.008)		.065 (.088)	.060 (.082)		.050 (.103)	.051 (.104)
Administration Climate										.310* (.596)			.073 (.214)
Social Climate										-.006 (-0.026)			.061 (.368)
R ²	.059	.047	.023	.094	.149	.092	.147	.014	.026	.105	.074	.082	.095

¹ Unstandardized regression coefficients in parentheses.

* p < .05

** p < .01

*** p < .001

Finally, the impact of the variables on staff development participation rates was examined. Considering the background variables alone, college teaching experience was significantly related to hours activities ($-.243, p < .01$), indicating that more experienced instructors tended to be less involved in individually-initiated staff development activities. This relationship remained evident when the locus of control variables were included in the analysis ($-.252, p < .01$). The background and locus of control variables together explained 2.6 and 8.2 per cent of the variance in participation in frequency and hours activities, respectively.

The inclusion of the organizational climate variables in the regression model improved the explanation of variance for frequency activities from 2.6 per cent to 10.5 per cent, but improved the explanation of variance for hour activities by just 1.3 per cent, from 8.2 to 9.5 per cent. This effect was largely explained by perception of administration climate, whereby more positive perceptions of climate were associated with higher participation in frequency activities.

To summarize, the ten variables in the model successfully explained 10.5 per cent of the variance in participation in frequency activities, and 9.5 per cent of the variance in participation in hours activities. College teaching experience and perception of administration climate were the most important determinants of staff development participation rates.

DISCUSSION

As mentioned, one of the significant findings of the study was that instructors who had taught in the college for a longer period of time were less involved in individually-initiated staff development activity than were the instructors who had taught in the college for a shorter period of time. The kinds of individual activities included in hours were wide-ranging, including improving instructional methods and subject mastery, developing expertise in curriculum design or program evaluation, exploring issues or trends in education, becoming acquainted with institutional concerns, enhancing understanding of the teaching-learning process, or working on career or personal development. In explaining the negative relationship noted between college teaching experience and hours, it may be that experienced instructors have already acquired mastery of subject content, and are familiar with the instructional methods that work best for them, as well as with the techniques of curriculum design and program evaluation. They may also have some understanding of the teaching-learning process. It would be logical, therefore, that time spent in these areas would decrease as teaching experience increased. However, hours spent in areas such as personal or career development could increase as free time became available. If, in fact, more time was spent in these areas, the negative relationship between teaching experience and hours would not exist, because the reduction in hours that might naturally occur as instructors became more experienced, would be offset by the increased hours spent in activities less directly related to instruction.

The analyses gave some indication that, compared to the newer instructors, the longer-term instructors were more likely to get involved in frequency activities, somewhat offsetting the reduced time spent in hours activities. Overall, however, it appeared that instructors spent less time on staff development activities the longer they taught. Since teaching hours remained relatively constant from year to year while time spent on staff development activity decreased, it could be concluded that instructors devoted less time to their jobs the longer they taught.

Within this context, the second significant finding is that a favorable perception of the administration climate enhanced participation in frequency activities and was positively related to participation in hours activities, could be interpreted to mean that if instructors saw that the workplace valued and facilitated the achievement of work goals, they were more willing to participate in staff development activities. However, participation in staff development activities might not occur unless instructors perceived that they needed staff development to improve their performance, and in addition, perceived a link between staff development and improved performance. Administrators play a role here in developing programs that will have a positive impact on performance, communicating the benefits to be derived from the programs to the instructors, and developing a performance appraisal system that provides feedback regarding performance, and distinguishes between good and poor performance in allocating organizational rewards. An administrative system that gives little support to staff development activities, provides no performance feedback, and allocates rewards irrespective of performance, reinforces the notion that the achievement of work goals, and therefore involvement in staff development activities, is of little significance. The findings of this study indicate that this could result in lower staff development participation rates.

Another factor besides perception of administration climate that might affect instructors' staff development participation rates is their locus of control orientations. It could be assumed, based on the study by Andrisani and Nestel (1976) that indicates that the longer someone works in the public sector the more external his locus of control tends to be, that a predominantly external orientation prevails in the college. Research identifies the "defensive external" who attributes his successes to relatively permanent, stable factors within himself, and his failures to external factors (Phares & Lamiell, 1974). The development of this type of orientation may be a realistic, adaptive response when working in an environment that seems to be impervious to individual attempts at control. Also, it would appear that the values held by externals may be more readily satisfied in the college environment than are those of internals (Linder et al., 1985). If internals seek more congenial employment elsewhere, over time the organization will tend to attract and retain employees with external orientations (Bereiter & Freedman, 1962). If this is true, then the reward structure could be a powerful tool in modifying behaviour.

The cultivation in the colleges of a more internal locus of control orientation with its attendant achievement orientation, might be helpful in promoting

educational and instructional excellence. However, the locus of control orientations of instructors is likely to remain unchanged without an infusion of funds geared toward the development and implementation of comprehensive staff development programs for both instructors and administrators. The inescapable conclusion of this study is that administrators play a major role in determining staff development participation rates in the colleges, first by making the funds available that enable staff to access staff development opportunities, and second by establishing an administrative structure that recognizes and rewards good performance, provides opportunities for remediation, where necessary, and encourages and facilitates continuous enhancement of skills. Since their role is particularly crucial in the case of instructors with external locus of control orientations, initial efforts to bring about change should be directed at them.

Therefore, the major value of this research was not to explain staff development participation rates, as there is still a substantial unexplained variance, but rather to highlight the administrator's role in encouraging staff development activity, to suggest how the individual's locus of control orientation might affect his staff development participation rates, and to propose that consideration of locus of control orientations might provide some indication of what strategies to use to encourage greater participation in staff development. Furthermore, this study suggests areas which may be explored in acquiring a better understanding of the determinants of staff development participation rates, and in validating, extending or disproving the model. Hopefully, this study has provided a starting point for further research in this area.

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