



## Teaching and Learning: The Journal of Natural Inquiry & Reflective Practice

---

Volume 5 | Issue 3

Article 5

---

12-1980

### Locus of Control, Academic Attitudes and Achievement in Two Methods of Instruction

Margaret E. Bell

John P. Dolly

Follow this and additional works at: <https://commons.und.edu/tl-nirp-journal>



Part of the [Scholarship of Teaching and Learning Commons](#)

---

#### Recommended Citation

Bell, Margaret E. and Dolly, John P. (1980) "Locus of Control, Academic Attitudes and Achievement in Two Methods of Instruction," *Teaching and Learning: The Journal of Natural Inquiry & Reflective Practice*: Vol. 5 : Iss. 3 , Article 5.

Available at: <https://commons.und.edu/tl-nirp-journal/vol5/iss3/5>

This Essay is brought to you for free and open access by UND Scholarly Commons. It has been accepted for inclusion in Teaching and Learning: The Journal of Natural Inquiry & Reflective Practice by an authorized editor of UND Scholarly Commons. For more information, please contact [und.commons@library.und.edu](mailto:und.commons@library.und.edu).

# **Locus of Control, Academic Attitudes and Achievement in Two Methods of Instruction**

Margaret E. Bell & John P. Dolly  
University of South Carolina

The role of aptitude testing is to identify the individual differences that predict performance in some situation, usually academic (Schuell, 1978). The long-standing focus on aptitude testing has been the identification of skills and abilities related to achievement. Recently, however, attention has shifted to the affective variables that may reliably predict student achievement.

Among the effective variables studied is perceived locus of control. The assumption is that the students who believe themselves to be responsible for their successes and failures (internals) will exhibit initiative and persistence in seeking achievement goals. Thus, these students will become more proficient in problem solving and will acquire more information than those who do not believe that they are responsible for their successes and failures (externals) (Rotter, 1966; Lefcourt, 1976). Prior research, however, has yielded contradictory results. Some studies indicate a relationship between internality and achievement (Phares, 1976) while others indicate no relationship (Johnson and Croft, 1975).

Keller, Goldman and Sutterer (1978) suggested that locus of control may be more directly related to attitudes than to achievement. The basis for their assumption is Weiner's finding (1975) that the goal attainment attributed to ability or effort (internal determinants) also tended to be related to affective responses such as pride of accomplishment or fear of failure. Therefore, Keller and his associates investigated the relationship between

locus of control, a self-report measure of study habits and study attitudes (Brown-Holtzman, 1967) and rate of progress and achievement. The study was conducted in a PSI course in introductory psychology.

The results of that study indicated statistically significant ( $p < .05$ ) but weak correlations between achievement and three of the subscales measuring study habits ( $r = .34$  for delay avoidance,  $r = .17$  for work methods,  $r = .17$  for education acceptance). All four of the study attitudes and habits subscales correlated negatively with rate of progress; the strongest relationship involved delay avoidance ( $r = -.39$ ). No relationship was found for locus of control with either rate of progress or achievement.

The above results were obtained in a personalized system of instruction. However, different study characteristics may be related to achievement in a more traditional setting. Therefore, the present study investigated the relationship of locus of control, study habits and study attitudes to achievement in two different instructional conditions. The methods of instruction used were the traditional lecture method and individualized television instruction.

## Method

### Subjects

Sixty-five students enrolled in an introductory educational psychology course participated in the study. All except three of the students were education majors who were planning to teach in the public school system.

### Instruments

Rotter's I-E Scale (1966) was used to measure locus of control. The twenty-nine item scale includes six filler items and is designed so that a high score

on the instrument indicates externality. Acceptable reliability estimates are reported by Rotter (1966) and Lefcourt (1976).

Study habits and study attitudes were measured by the 100-item SSHA scale developed by Brown and Holtzman (1967). The four subscales of the instrument are delay avoidance, work methods, teacher approval, and education acceptance. Delay avoidance and work methods are summed for a "study habits" score while teacher approval and education acceptance are combined for a "study attitudes" score. Both stability and predictive and discriminant validity have been demonstrated by Brown and Holtzman (1967) for the use of the instrument in educational research.

### Procedures

The undergraduate course, "Introduction to Educational Psychology," includes two major segments. Segment I (measurement of individual differences) is conducted in the standard lecture format. Segment II (the design of instruction) is individualized using television cassette tapes and formative exercises. Feedback to the students concerning the answers to the formative exercises is provided by the television tapes. During Segment I of the course students report to the regular classroom at the assigned class time. For Segment II they report to the resource laboratory whenever they choose between the hours of 8:30 A.M. and 4:00 P.M.

Rotter's I-E scale and the SSHA were administered on the first day of class. The first achievement test was given following Segment I of the course and the second following Segment II.

Demographic data collected on the subjects included both sex and age. The relationships between these variables and the affective variables and achievement were also obtained.

### Results

The results of the study indicated a relation-

ship between age and study habits and attitudes. For study attitudes (value for education), the correlation was .43 ( $p < .0002$ ), while for study orientation (work methods) the correlation with age was .43 ( $p < .004$ ). Age was not related to locus of control. Furthermore, sex was not related to any of the affective variables.

Study habits and attitudes were only moderately related to achievement. Delay avoidance correlated with achievement .26 ( $p < .03$ ) following the lecture segment of the course. However, achievement following the individualized instruction was related only to work methods,  $r = .29$  ( $p < .01$ ). Locus of control was not related to student performance on either achievement test.

### Conclusions

This study supports the results obtained by Keller, et al., 1978. That is, locus of control is not related to achievement, but certain work habits are important. Similar to the prior study, achievement was slightly related to delay avoidance and work methods.

For college students, then, in traditional or individualized instruction, locus of control is not a predictor of achievement. Its importance as a variable may be in the selection of optimum learning environments for students. Future research on locus of control should address this question.

## References

- Brown, W. F. and Holtzman, W. H. Survey of study habits and attitude: manual. New York, The Psychological Corporation, 1966.
- Johnson, W. G. and Croft, R. G. F. Locus of control and participation in a personalized system of instruction course. Journal of Educational Psychology, 1975, 67: 3, 416-421.
- Keller, J. M., Sutterer, J. R., and Goldman, J. A. Locus of control in relation to academic attitudes and performance in a P 51 course. Paper presented at the annual meeting.
- Lefcourt, H. H. Locus of control: Current trends in theory and research. Hillsdale, N.J.: Lawrence Erlbaum Associates, 1976.
- Phares, E. J. Locus of control in personality. Morristown, N.J.: General Learning Press, 1976.
- Rotter, J. B. Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 1966, 80, (1, Whole No. 609).
- Schuell, T. J. Toward understanding aptitudes: A process approach. Paper presented at the annual meeting of American Educational Research Association, Toronto, Canada, March, 1978.
- Weiner, B. Achievement motivation as conceptualized by an attribution theorist. In B. Weiner (ed.), Achievement motivation and attribution theory. Morristown, New Jersey: General Learning Corporation, 1974.