

September 2019

## Hearing-Impaired College Students' Academic Motivation, College Degree Plans, and Locus of Control – A Relationship?

Fairy Cesena Hayes-Scott

*Charles Stewart Mott Community College, Flint Michigan*

Follow this and additional works at: <https://repository.wcsu.edu/jadara>

---

### Recommended Citation

Hayes-Scott, F. C. (2019). Hearing-Impaired College Students' Academic Motivation, College Degree Plans, and Locus of Control – A Relationship?. *JADARA*, 21(1). Retrieved from <https://repository.wcsu.edu/jadara/vol21/iss1/9>

## HEARING-IMPAIRED COLLEGE STUDENTS' ACADEMIC MOTIVATION, COLLEGE DEGREE PLANS, AND LOCUS OF CONTROL – A RELATIONSHIP?

**Fairy Cesena Hayes-Scott**  
**Charles Stewart Mott Community College**  
**Flint, MI**

This study explores academic motivation of college hearing impaired students as it correlates with two variables. More specifically, this study examines the relationship among academic motivation to improve English writing skills and variables such as:

1. College degree plans and
2. Sense of control (locus of control).

The present study defines academic motivation as performance on the author's revision of Herman's *Prestatie Motivatie Test* (Hermans, 1970). The PMT is a self-report measure of motivation. The instrument contains items that focus on achievement and neutral situations. The author has revised the instrument to specifically focus on the improvement of English writing skills.

Those persons perceiving reinforcement based upon their behavior will see themselves as having an internal sense of control; those perceiving a lack of control of their environment will view themselves as externally controlled (Rotter, 1966). To be more precise,

internal control refers to the perception of positive and/or negative wants as being a consequence of one's own actions . . . external control refers to...events as being unrelated to one's own behavior ...and therefore beyond personal control (Lefcourt, 1976, p. 207).

Improving one's writing skills is a highly structured task. Feather (1967) finds a highly structured task tends to affect the degree of motivation an individual has toward completing it. Deci (1975) sees the concept of internal locus of control as being the key factor in regard to intrinsic motivation. Deci continues to point out that external control functions as a defense response to failure. The external-control individual avoids tasks which are highly-structured. These points are relevant to the highly structured task of writing and the mastery of this task.

The student who feels a personal responsibility for the improvement of an academic task

may be more strongly motivated than a person who does not feel any personal control or responsibility (Crandall, Katovsky & Crandall, 1965; Ramanaiah, et al., 1975; Lefcourt, 1976). Not surprisingly, a disproportionately high number of externals are found lower in academic achievement contrasted to internals (Chandler, 1975). Several studies (Battle & Rotter, 1963; McGhee & Crandall, 1968; White & Howard, 1970; Nowicki & Strickland, 1971) indicate the relationship between locus of control and academic motivation.

Caughren (1973) sees the relationship between academic motivation and college plans. Most specifically in relation to academic settings, Astin (1972) finds that "the most important predictors of undergraduate achievement were the student's intended field of study and his career choice at the time he entered college" (p. 202). Also, Berman (1972) finds a relationship between academic achievement of high school seniors and their post-secondary plans.

Many times the entering hearing-impaired college student is not certain about his college plans. However, those students who have college degree plans tend to earn a degree. Crandall (1976) finds that the students' career degree plans have a positive effect on college hearing impaired students' improvement of writing skills.

This study is an outgrowth of two previous studies on the academic motivation of hearing impaired college students to improve their writing skills. One study shows that hearing-impaired college students vary in their levels of academic motivation similar to normally hearing students (Hayes-Scott, 1983). The second study compares college hearing and hearing impaired students' motivation to improve writing skills (Hayes-Scott & Dowaliby, 1984). That study shows no significant difference. Since research shows relationships between certain variables and academic motivation for hearing students, cannot also these results be comparatively the

## HEARING IMPAIRED COLLEGE STUDENTS' ACADEMIC MOTIVATION, COLLEGE DEGREE PLANS, AND LOCUS OF CONTROL – A RELATIONSHIP?

same for hearing impaired students?

### HYPOTHESES

1. Academic motivation of hearing impaired college students to improve their writing skills correlates positively with their college degree plans.
2. Academic motivation of hearing impaired college students to improve their writing skills correlates positively with the strength of the internal locus of control.

### DEFINITION OF TERMS

The Hearing impaired individuals are defined for the purpose of this study as the following:

1. Those individuals with severe and profound loss of 70dB American National Standard Institute (ANSI) or greater in the better ear (Mindel & Vernon, 1971).
2. Those individuals who do "not receive speech sounds clearly enough through their hearing to develop spoken language..." without intervention (Mindel & Vernon, 1971, p. 31).
3. Those individuals whose speech discrimination score on Central Institute for the Deaf (CID) everyday sentences is less than 15%. (This percent has been established as a prerequisite for speech courses requiring self-monitoring through audition at the National Technical Institute for the Deaf.) This score points out those students unable to develop spoken language through audition.

*Academic motivation* is defined for the purpose of this study as the performance measured by Herman's PMT.

*College degree plans* are defined in terms of the degrees students can receive in a post-secondary education: 1) certificate; 2) diploma; 3) associate's degree; and 4) baccalaureate.

*Locus of control* is defined as an individual's perception of a reward of reinforcement – externally or internally – as measured by Crandall, Katovsky & Crandal (1965) with the Intellectual Achievement Responsibility (IAR) scale.

When a reinforcement is perceived by the subject as following some action of his own but not entirely contingent upon his action, then...it is typically perceived

as the result of luck, chance, fate... When the event is interpreted in this way, by an individual, we have labeled this a belief in *external control*. If the person perceives that the event is contingent upon his own behavior or his own relatively permanent characteristics, we have termed this a belief in *internal control* (Rotter, 1966, p. 1).

### METHOD

#### Subjects

Paid participants included 80 hearing impaired first semester college freshmen, 39 males and 41 females, attending the National Technical Institute for the Deaf (NTID). Their pure tone averages in the better ear ranged from 70 dB to 120+ dB (ANSI, 1970). The average age for these students was 19.2 years. Most students (94%) had parents who were hearing; 3% had both parents who were deaf. Their mean grade equivalent reading ability was 9.8 and ranged from 7.8 to 12. There were no known disabilities other than deafness that may affect these results.

#### Procedure

The revised-PMT and IAR scale (the author modified a few items' word choices) were administered to groups of 25 or fewer students at a time. The internal consistencies for the revised-PMT was .77 and for the IAR .66 computed using Cronbach's Alpha. The author presented the directions using simultaneous communication and printed directions shown on an overhead projector.

### ANALYSES AND RESULTS

#### Hypothesis 1

Academic motivation of hearing impaired college students to improve their writing skills correlates positively with their levels of college degree plans.

The results do not confirm the hypothesis (Table 1). The correlation is not significant beyond the 95% confidence interval ( $r = .07$ ;  $p > .05$ ). Thus, college hearing impaired students' college degree plans do not relate significantly with their academic motivation to improve writing skills.

#### Hypothesis 2

Academic motivation of hearing impaired college students to improve their writing

## HEARING IMPAIRED COLLEGE STUDENTS' ACADEMIC MOTIVATION, COLLEGE DEGREE PLANS, AND LOCUS OF CONTROL – A RELATIONSHIP?

skills correlates positively with the strength of their internal locus of control.

**TABLE 1**  
Correlation of Two Variables With Academic  
Motivation Scores on the Revised-PMT

Variables	Standard Means	Corre- Deviation	Signifi- cation	Signifi- cance
College Degree Plans	2.12	0.832	.07	.24739
Total IAR Scores	23.17	4.224	.31	.00251

The results confirm the hypothesis (Table 1). The correlation is significant beyond the 95% confidence interval ( $r = .31$ ;  $p < .05$ ). The investigator has performed two two-tailed "t" tests to determine if the responses are significantly different between the sexes and communication modes (oral and simultaneous communication); none exists for this study. Thus, college hearing impaired students' performance on the IAR (scores indicating locus of control) does relate significantly with their academic motivation to improve writing skills.

### DISCUSSION

The results of this study illustrate that the relationship between certain variables and academic motivation are not comparatively the same for the normally hearing and hearing impaired populations. Comparisons of data from studies of normally hearing populations with data from this study demonstrate differences. For example, Reid and Cohen (1973) find a significant correlation between college degree plans and academic motivation. Schultz and Pomerantz (1976) find a significant correlation of .52 between locus of control and academic motivation. In contrast, the investigator finds for her college hearing impaired population correlations of .07 and .31 between college degree plans and locus of control, respectively, and academic motivation to improve a specific academic skill – writing.

Hypothesis 1: A significant positive correlation of college degree plans with the college hearing-impaired students' academic motivation is not found. Many entering hearing impaired freshmen are not well-informed about such academic requirements as prerequisites necessary to enter a particular field of interest. In time, with academic or work experience, their college degree plans become realistic. So, the results of this study may not be that

different from the literature. The time when one inquires about the college hearing impaired student's college degree plans may be the critical factor. The issue of time should be further investigated.

Hypothesis 2: A significant positive correlation of locus of control with the college hearing impaired students' academic motivation to improve writing skills is evident. Literature regarding the normally hearing suggests a significant relationship between locus of control and academic motivation (Weiner & Kukla, 1970; Wolk & DuCette, 1973). This study indicates a similar relationship for hearing impaired college students. The investigator has used the IAR to determine internal or external locus of control. The extent to which college hearing impaired students feel they can influence academic situations (internal control) relates positively to their academic motivation to improve their English writing skills.

Therefore, educators need to think of ways they can increase the internal locus of control of hearing impaired college students. Possibly, with more hearing-impaired college students having internal locus of control, there will be a concomitant increase in motivation to improve English writing skills. With such motivation, more hearing impaired college students may improve their writing skills.

Some subjects (12) have had difficulty with the forced-choice format of the IAR. Also, some vocabulary items, such as, *cranky*, easily understood by most normally hearing children, are difficult for some hearing impaired freshmen. Persons planning to use the IAR in research with the hearing impaired persons should note the instrument's disadvantages.

Good writing skills are imperative for any student, most especially a hearing impaired student, to succeed in college. If educators know what items correlate with the motivation to improve these skills, then they may help increase the college hearing impaired student's academic success. Hearing impaired students need career counseling which explicitly indicates the necessity for solid writing skills for a successful college experience. Also, educators need to work to increase the internal locus of control of hearing impaired students. It is imperative that they realize they are the key persons responsible for their successes and failures. Hopefully, educators can devise methods to increase

## HEARING IMPAIRED COLLEGE STUDENTS' ACADEMIC MOTIVATION, COLLEGE DEGREE PLANS, AND LOCUS OF CONTROL – A RELATIONSHIP?

academic motivation to improve writing skills and the actual skill of writing; in order to suc-

ceed in college and the larger society, the hearing impaired students need both.

### REFERENCES

- American National Standards Institute Specifications for Audiometers. (1970). (ANSI S3.6-1969). New York: American National Standards Institute, Inc.
- Astin, A. W. (1972). Undergraduate achievement and institutional "excellence." In K. Feldman (ed.). *College and student: Selected readings in the social psychology of higher education*. New York: The Free Press.
- Atkinson, J. W. (1957). Motivational determinants of risk taking behavior. *Psychological Review*, 64, 359-372.
- Battle, E., & Rotter, J. B. (1963). Children's feelings of personal control as related to social class and ethnic group. *Journal of Personality*, 31, 482-490.
- Berman, Y. (1972). Occupational aspirations of 545 female high school seniors. *Journal of Vocational Behavior*, 2, 173-177.
- Caughren, H. (1973). An experimental measure of motivation for community college students. *Journal of College Student Personnel*, 16, 232-237.
- Committee on the Student in Higher Education. (1968). *The students in higher education*. New Haven, CT: Hazen Foundation.
- Crandall, K. E. (1976). The NTID Written Language Test: Procedure and Reliability. Paper presented at the Annual Convention of the American Speech and Hearing Association.
- Crandall, V. C., Katovsky, W., & Crandall, V. J. (1965). Children's beliefs in their own control of reinforcements in intellectual academic achievement situations. *Child Development*, 36, 91-109.
- Deci, E. L. (1975). *Intrinsic motivation*. New York: Plenum Press.
- Feather, N. T. (1967). Some personality correlates of external control. *Australian Journal of Psychology*, 19, 253-260.
- Hayes-Scott, F. C. (1983). Motivation of college hearing-impaired students to improve English writing skills. (Doctoral dissertation, University of Michigan). *University Microfilms International*, 83-14, 297.
- Hayes-Scott, F. C., & Dowaliby, F. (1984). Academic motivation to improve writing skills: A comparison of normally hearing and hearing-impaired students. *American Annals of the Deaf*, 129, 431-434.
- Hermans, H. J. M. (1970). A questionnaire measure of achievement motivation. *Journal of Applied Psychology*, 54, 353-363.
- Illo, J. (1976). From senior to freshman: A study of performance in English composition in high school and college. *Research in the Teaching of English*, 10, 127-136.
- Katz, I. (1967). The socialization of academic motivation in minority group children. In D. Levine (ed.), *Nebraska symposium on motivation*. Lincoln: University of Nebraska Press.
- Lefcourt, H. M. (1976). *Locus of control: Current trends in theory and research*. Hillsdale, N.J.: Erlbaum.
- Mann, Sister M. J. (1961). The prediction of achievement in a liberal arts college. *Educational and Psychological Measurement*, 21, 481-483.
- McGhee, P. E., & Crandall, V. C. (1968). Beliefs in internal-external control of reinforcements and academic performance. *Child Development*, 39, 91-102.
- Mindel, E. D., & Vernon, M. (1971). *They grow in silence: The deaf child and his family*. Silver Spring, MD.: National Association of the Deaf.
- Nowicki, S., & Strickland, B. R. (1971). A locus of control for children. Unpublished manuscript, Emory University.
- Ramanaiah, N. V., Ribich, F. D., & Schmick, R. R. (1975). Internal external control of reinforcement as a determinant of study habits and academic attitudes. *Journal of Research in Personality*, 9, 375-384.
- Reid, I., & Cohen, L. (1973). Achievement orientation, intellectual achievement responsibility and choice between degree and certificate courses in colleges of education. *British Journal of Educational Psychology*, 43, 63-66.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80, 1-28.
- Schultz, C. B., & Pomerantz, M. (1976). Achievement motivation, locus of control, and academic behavior. *Journal of Personality*, 44, 38-51.
- Weiner, B. (1965). The effects of unsatisfied achievement motivation on persistence and subsequent performance. *Journal of Personality*, 33, 428-442.
- Weiner, B., & Kukla, A. (1970). An attributional analysis of achievement motivation. *Journal of Personality and Social Psychology*, 15, 1-20.
- White, K., & Howard, J. L. (1970). The relationship of achievement responsibility to instructional treatments. *Journal of Experimental Education*, 39, 78.
- Wolk, S., & DuCette, J. (1973). The moderating effect of locus of control in relation to achievement motivation variables. *Journal of Personality*, 41, 59-70.