

**OCCUPATIONAL INFORMATION-SEEKING AS A FUNCTION  
 OF PERCEPTION OF LOCUS OF CONTROL AND OTHER  
 PERSONALITY VARIABLES**

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Abstract

The relationships between internal-external locus of control, career maturity, occupational information-seeking, and sex were examined. Two hundred and forty 9th-grade students, 137 males and 103 females, were administered Rotter's Internal-External Locus of Control Scale and Crites' Career Maturity Inventory. Occupational information-seeking was assessed using a paper-and-pencil measure designed to elicit exploratory behavior of a vocational nature. Product-moment correlations, analyses of variance, and multiple regression analyses indicated that locus of control significantly correlated with career maturity. It was also found that career maturity was correlated significantly with occupational information-seeking behavior. Both significant and non-significant results were discussed.

Résumé

Ce travail a pour but d'examiner les relations entre le lieu de contrôle (interne-externe), la maturité vocationnelle, le comportement de recherche d'information occupationnelle et le sexe. Deux cent quarante étudiants de secondaire III répartis en 137 garçons et 103 filles ont répondu au Internal-External Locus of Control Scale de Rotter et au Career Maturity Inventory de Crites. La mesure du comportement de recherche d'information occupationnelle s'est faite à l'aide d'un instrument papier-crayon destiné à mettre en évidence le comportement exploratoire de nature vocationnelle. Des corrélations, des analyses de variance et des analyses de régression multiple ont démontré un lien significatif entre le lieu de contrôle et la maturité vocationnelle. On a aussi observé que la maturité vocationnelle était en corrélation significative avec le comportement de recherche d'information occupationnelle. Les auteurs procèdent à une discussion des résultats à la fois significatifs et non significatifs.

Counsellors are perennially surprised by clients who engage in behaviors that can only lead to the frustration of their goals. These clients have also often neglected to engage in activities that would heighten the likelihood

of achieving even their most cherished aspirations. In no area of human striving is this more true, it seems, than in that of vocational development.

The task of choosing suitable career goals, leave alone taking the measures necessary to realize them, requires effort which legions of youngsters hardly bother to make. Many of us who are vocational guidance counsellors

are astounded by the lack of proportion that exists between the gravity of their career decisions (which they frequently simply flounder into) and the means they have taken to ensure that those decisions are good ones.

In that perspective the authors decided to look at some probable correlates of occupational information-seeking behavior. If individual survival, not to mention prosperity, depends on the quality of information one has access to in making critical decisions — from crossing a busy highway to investing in a real estate market — then it is of some interest to understand the psychological substrate disposing one to actively seek information that is vital to one's interests. No doubt the variables involved are numerous. This study was intended to look at a few of them, to wit, the constructs measured by (a) the Rotter (1966) Scale and (b) the Career Maturity Inventory (Crites, 1973) and, finally, the sex of the information-seeker.

Some historical background at this point for those who are not vocational specialists may be of some value. In an effort to extend vocational theories beyond the trait-and-factor approaches of the pre-'50s, considerable energy has been invested in the last generation in formulating and testing theories that are more developmental in character. Credit is due to Ginzberg and his associates for the impulse which they gave to the study of the developmental processes implicated in occupational choice (Ginzberg, Ginsburg, Axelrad, & Herma, 1951; Ginzberg, 1952). They explained the evolution of this choice as a developmental process by which an individual arrived at a career decision only over successive life stages. This theory was not unlike that proposed by Super (1953). In fact, Super added considerably to vocational choice theory by accentuating the developmental aspects of career choice. The influential concept of vocational maturity was introduced and, under his supervision, subsequently investigated in the Career Pattern Study (Super, 1955; 1957; Super, Crites, Hummel, Moser, Overstreet, & Warnath, 1957; Super & Overstreet, 1960).

Emerging from this work was a model of vocational maturity which sought to explain the progressive changes that occur as an individual attempts to cope with a succession of relevant career development tasks. The central position afforded vocational maturity in the vocational development theories of recent years has promoted considerable research focusing on the developmental tasks involved in making career choices. Super's (1957) initial schema provided several indices of vocational maturity. These were later

developed into a research model by Crites (1961; 1965) which led to the revision of the Vocational Development Inventory. In its present form, it is known as the Career Maturity Inventory (Crites, 1973).

One finds the notion of an underlying relationship between vocational behavior and personality in most theories of vocational development (Osipow, 1973; Tolbert, 1974). In fact, numerous studies have related the Attitude Scale of the Career Maturity Inventory (CMI) to various aspects of personality. There is some evidence correlating maturity of vocational attitudes to dimensions of adjustment, confidence, and self-esteem (Bartlett, 1968; Hollender & Schalou, 1965). More specifically, it has been found that individuals with vocationally mature attitudes are more independent, goal-directed, and task-oriented (Crites, 1971).

In certain respects, these characteristics bear a strong resemblance to the personality construct, internal-external control of reinforcement, or simply locus of control. Social learning theory (Rotter, 1954) provided the basis for this construct. It describes the extent to which an individual feels he is in control of the sources of reinforcement in his life. Those who feel they have relatively little control and that in fact luck and fate, on the one hand, or powerful "others", on the other hand, are the principal determinants of their rewards are designated "externals". Those, on the other hand, who feel they have considerable control of the locus of reinforcement in their life are designated "internals". A large body of literature relative to this construct has been published, especially since the publication of paper-and-pencil scales, and excellent reviews are available (Rotter, 1966; Joe, 1971; Phares, 1976). It should be noted that by now the scale is widely accepted as multidimensional. However, the authors chose to stay with the global aspect of this construct.

There is much evidence that internals' have greater success in dealing with their environments than those who score high on externality. They are higher academic achievers, use information more productively, are less manipulated or coerced, and, in general, are better prepared to improve their situation through active striving (Lefcourt, 1966; Hjelle, 1970; Feather, 1967; Doctor, 1971). There is another stream of research on this construct that indicates that internals demonstrate better personality and emotional adjustment (Phares, 1976). These considerations lead one to ask the following questions: How does this construct relate to vocational behavior? Is it that the more internal a high-school student is the

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more actively information-seeking will he be relative to making occupational choices and career decisions (Prociuk & Breen, 1977)?

Sex roles are well known to have an influence on the vocational choices that individuals make. The landmark study of Maccoby and Jacklin (1974) has dispelled many of the myths and near-myths that have powerfully shaped those roles. The roles are still pervasive, developmental in character, and of interest to the practitioner of vocational counselling. In view of that, it was felt to be of value to examine the relationship of this variable also to occupational information-seeking.

To sum up, the purpose of this study was to determine the extent to which variance in occupational information-seeking behavior was accounted for by the variables, locus of control, career maturity, and the sex of the high-school student.

### *Method*

#### *Subjects*

The sample consisted of 240 English-speaking students drawn from 12 9th-grade classes in a lower middle-class high school in the northeast area of Montreal. The subjects were randomly drawn from the pool of 12 classes in this school. However, they were kept class-intact during testing. Of the total sample, 137 were male, 103 were female. Mean age of the students was 14 years 7 months.

#### *Instruments*

The Internal-External (I-E) Locus of Control Scale (Rotter, 1966) is a 29-item, forced-choice questionnaire. Six of the items are fillers so that only 23 of the items contribute to the overall score. The student reads pairs of statements and indicates which of the two he more strongly believes. The larger the score (0 to 23) the more external is the testee.

The Career Maturity Inventory (CMI) which consists of two parts, an Attitude Scale and a Competence Test, was developed by Crites (1973) to provide indices of vocational development. Only the Attitude Scale, which is a 50-item true or false questionnaire assessing an individual's attitudes and orientation towards work and level of vocational maturity, was administered.

Information-seeking (I-S) behavior was defined as the total score on a Likert-type scale designed to assess exploratory behavior

of a vocational nature. This questionnaire is a behavioral self-report similar to that used in investigations of this type (Krumboltz & Thoresen, 1964; Stilwell & Thoresen, 1972). This self-report tapped the number of information-seeking behaviors the subjects engaged in that were pertinent to vocational planning; these included such broad areas as: talking to significant others such as parents, teachers, relatives, and/or friends who have knowledge pertinent to an occupation being considered; seeking out and using relevant audio-visual and/or printed materials; and the planning or making of a visit to a workplace offering career or occupational opportunities.

Following the procedure outlined by others (Thoresen & Krumboltz, 1967, 1968; Thoresen, Krumboltz, & Varenhorst, 1967), the accuracy of the self-report I-S scale was ascertained through an evaluation interview for a randomly selected sub-sample of 40 students. The interview was designed to assess the extent and type of information-seeking behavior acquired during the six-week experimental period. This information was checked against records kept relative to individual appointments to the guidance services for vocational counselling and the number of visits made to the occupational information library in the school during this time period. The results of this verification indicated that 82% of the reported information-seeking behaviors were verifiable.

#### *Procedure*

All students were administered the I-E Scale and the CMI during school time in two separate sessions on consecutive days. In an effort to control for temporal effects, the measures were administered to randomly scheduled classes during the course of the day.

Following the testing, the students were taken to the school's occupational information library and given a brief orientation talk stressing its use and availability to them. An invitation to avail themselves of its services and resources was extended to them. For a 6-week period, the students' visits to the occupational information library were recorded, as were the appointments made to the guidance services.

At the end of this 6-week period, all students were administered the I-S self-report scale.

### *Results*

Pearson product-moment correlations among the three variables are presented in

Table 1. The expected negative relationships between I-E and both CM (Career Maturity) and I-S were confirmed. However, only the relationship between I-E and CM attained significance. The relationship between the two vocationally-oriented variables (CM and I-S) was also significant at the .002 probability level.

Table 1

Intercorrelations among the Experimental Variables  
for the Total Group (N = 240)

	I-E	CM	I-S
Internal-External Locus of Control (I-E)		-0.134 $p = 0.019$	-0.001 $p = 0.491$
Career Maturity (CM)			0.189 $p = 0.002$
Information-Seeking (I-S)			

To examine whether these relationships differed for males and females, correlation analyses were conducted for each sex. Tables 2 and 3 present these analyses for males and females respectively. The relationships between I-E and both CM and I-S were not significant, and in the case of I-S not even in the expected direction for the males. However, the significant relationship between CM and I-S was supported. On the other hand, the relationships between I-E and both CM and I-S, for the females, were significant while that between CM and I-S was not. This different pattern was strongly suggestive of a sex difference which warranted examination.

Table 2

Intercorrelations among the Experimental Variables  
for the Males (N = 137)

	I-E	CM	I-S
Internal-External Locus of Control (I-E)		-0.123 $p = 0.076$	0.115 $p = 0.092$
Career Maturity (CM)			0.207 $p = 0.008$
Information-Seeking (I-S)			

Table 3

Intercorrelations among the Experimental Variables  
for the Females (N = 103)

	I-E	CM	I-S
Internal-External Locus of Control (I-E)		-0.068 $p = 0.045$	-0.233 $p = 0.009$
Career Maturity (CM)			0.139 $p = 0.081$
Information-Seeking (I-S)			

To test for differences across the sexes, three separate oneway analyses of variance were conducted on the experimental variables with sex as the independent variable. The analyses of the data yielded no significant differences between the sexes. However, the analysis of variance for I-S by sex approached significance ( $F=3.67$ ,  $df=1$ , 238,  $p=.056$ ). In fact, the females ( $M=21.2$ ) were observed to seek out information related to career planning less actively than did the males ( $M=22.3$ ).

In order to determine the predictive value of sex, I-E, and CM on the outcome variable I-S, a stepwise multiple regression analysis was conducted. The data are presented in Table 4. Although the analysis yielded significant results, the combination of the three predictor variables only accounted for 4.8% of the total variance, which is relatively low. Locus of control, the main construct under investigation, was the last variable to be entered in the regression equation adding virtually nothing to the variance. Therefore, I-E as measured by the Rotter instrument must be considered a poor predictor of vocational information-seeking behavior.

Table 4

Stepwise Multiple Regression for Predictor Variables  
of Information-Seeking Behavior for the  
Total Group (N = 240)

Variables selected	R	R <sup>2</sup>	df	F	p
CM	0.189	0.036	1,238	8.87	< .01
SEX	0.218	0.048	2,237	5.92	< .01
I-E	0.219	0.048	3,236	3.95	< .01

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When the sex variable was controlled by conducting separate analyses for males and females, an interesting pattern was observed. These analyses are presented in Table 5 and 6. For the males CM was observed to be a better predictor of I-S than I-E, while the opposite was true for the females. Furthermore, a combination of both predictor variables accounted for 6.2% and 6.4% of the variance, for males and females respectively.

Table 5

Stepwise Multiple Regression for Predictor Variables  
of Information-Seeking Behavior for the  
Males (N = 137)

Variables selected	R	R <sup>2</sup>	df	F	p
CM	0.206	0.043	1,135	6.01	< .025
I-E	0.249	0.062	2,134	4.46	< .025

Table 6

Stepwise Multiple Regression for Predictor Variables  
of Information-Seeking Behavior for the  
Females (N = 103)

Variables selected	R	R <sup>2</sup>	df	F	p
I-E	0.233	0.054	1,101	5.78	< .025
CM	0.254	0.064	2,100	3.44	< .05

## Discussion

This research was intended, in part, to see whether there is any validity in applying a clinically-based construct, namely locus of control, to the more vocationally-oriented concepts of career maturity and occupational information-seeking behavior. The research questions assumed that a relationship exists between an individual's belief that desired outcomes are contingent upon his own behavior and active information-seeking as related to careers and occupations. Furthermore, the authors reasoned that locus of control, as a personality measure, would be reflected by the maturity of an individual's vocational attitudes.

Part of the analyses attempted to determine relationships among the I-E, CM, and I-S measures. The presence of an overall statistically significant correlation between locus of control and career maturity seems to indicate that a person's belief in the ability to control the course of events in his life is reflected in the nature of his attitudes towards

the world of work and career choice. The more internal a person is, the more likely he is to manifest greater maturity in making career decisions. This tendency suggests that internals are more vocationally mature than externals, which is in agreement with the notion that internals are seen as demonstrating better personal adjustment.

The absence of a significant relationship for the entire group between the I-E and I-S measures is a puzzling phenomenon since it would call into question the validity of the I-E measure for this study. The notion that a person who feels in control of his life events should have a need to seek out pertinent information relevant to his life decisions seems logical. On the other hand, the possibility that internals, feeling more in control, may in effect have less of a need to actively seek out information, must be considered. This may, in fact, be offered as an explanation for the results of this study.

The question arises as to whether the whole matter of career planning is so remote from the perceived needs of these 9th-grade students that the information-seeking task was surrounded with an aura of unreality. If this is even partially true then there is evidence that the use of such young subjects may have given us different results than we would have gotten with older ones (Wheeler & Davis, 1979).

The most striking aspect of the present findings is the different relationships among the experimental variables for each sex. In this study, locus of control was significantly related to CM but not to I-S for the males, while it related significantly to both variables for the females. Furthermore, the CM was significantly related to I-S for the males, but not for the females. These results indicate that the males with more favorable attitudes toward making career choices more actively sought out occupational information than did the females. A possible explanation for the lack of a significant relationship for the females is suggestive of different socialization patterns, sex-role definition, and/or differential perceptions of the value of occupational information. In summary then, it would seem that there are differences which exist between the sexes in terms of their approach to vocationally-oriented activities. The curious pattern of intercorrelations along with the absence of main effects for the three measures might signal the presence of subtle and complex differences between the sexes that contribute to the data pattern found here.

Finally, if we consider I-S behavior as a valid index of future success in career choice, then the I-E and CM as predictors of this success have limited utility. That the combined effects of these variables account for little more than 6% of the variance makes for weak predictive usefulness. However, if one had only these measures by which to determine the frequency of I-S behavior, he would have to be selective of the instruments to use on the basis of sex, as the present results indicate different predictive strength for each measure for each sex.

### Conclusions

Although expectations that there existed a relationship between locus of control, career maturity, and information-seeking behavior were not fully realized, this study does suggest that locus of control has utility for distinguishing individual differences in career attitudes and maturity among high-school students. The implications of this finding for counsellors are that personological features of clients as they relate to information-seeking and other aspects of career decision making need to be considered more carefully than has been proposed in the past.

The findings suggest further that if we are concerned with enhancing career development of youth, then sex differences in career information-seeking need to be attended to. Career education programs need to be developed which provide for each sex varied experiences through which pertinent occupational information may be acquired. Clearly, our profession could use a great deal of further research in the area of sex differences that are related to career-oriented factors.

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<p>...keeping a job?</p>	<p>USE</p>	<p>Moving on TO A JOB </p>	<p>PLACE </p>



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