

Occupational Desirability and Choice as a Function of Communication Apprehension

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Research on vocational desirability and choice has seldom examined the role of either perceived communication requirements or communication apprehension in career decisions. Communication apprehension, the apprehension an individual has about interpersonal communication, was hypothesized to affect both the perceived desirability of a number of occupations and the actual job choice made by subjects. Both hypotheses received support. High apprehensives perceived low-communication occupations as significantly more desirable than high-communication occupations. Low apprehensives, on the other hand, perceived high-communication occupations as significantly more desirable than low-communication occupations. Occupational choices of high apprehensives were significantly lower in perceived communication requirements than those selected by low apprehensives.

Many of the theoretical explanations of vocational choice suggest that an individual's choice of occupation is a function of the perceived desirability of a particular occupation when compared to others. This comparison process tends to be based upon both psychological and sociological traits and events (e.g., Crites, 1969).

Among the variables that have been investigated empirically in relation to vocational desirability and choice are the individual's tolerance for ambiguity (Budner, 1962), his or her self-concept (Oppenheimer, 1966) and self-esteem (Korman, 1966), the aspirations held for the individual by relevant and significant others (Green & Parker, 1965), and the motivation of the individual to seek gratification from the occupation and from life in general (Bordin, Nachmann, & Segal, 1963).

One variable that has received little attention in the research on vocational choice is the perceived communication requirement of an occupation. Undeniably, every occupation requires some communication. Yet there are some occupations that require a great deal of interaction and others that require only a minimal amount. The factor of occupational desirability based on the

perceived communication requirements of an occupation may be directly affected by a personality characteristic that has been termed "communication apprehension" (McCroskey, 1970, 1972). The individual with high communication apprehension is a person whose apprehension about participating in communication outweighs his or her projection of gain from communicating in a given situation (Phillips, 1968). He or she anticipates negative feelings and outcomes from communication and will either avoid communication, if possible, or suffer from a variety of anxiety feelings while communicating. Not only does high communication apprehension affect the individual as a source of communication, but it also affects the way in which the individual receives communication from others. Many times the high-apprehensive individual will be so anxious about the communication situation that he or she may not function well as a receiver of communication.

Research conducted in three separate regions of the country has provided strong evidence of the pervasive nature of communication apprehension. Results indicate that 30-40% of the population suffer from above-average levels of this anxiety (McCroskey, 1972). Previous research has indicated that high apprehensives tend to withdraw from communication when possible (Phillips, 1968), even to the point of select-

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ing inconspicuous seating and remote housing (McCroskey & Lepard, Note 1). When they do communicate they talk less than others (Wells & Lashbrook, Note 2), their interaction tends to be less related to the topic under discussion (Wells & Lashbrook, Note 2), and they engage in less self-disclosure (Hamilton, 1972). As a result they tend to be perceived negatively by others (Quiggins, Note 3).

Communication apprehension, therefore, has been found to be a widespread phenomenon that negatively affects a large number of people. Since organizations depend primarily on interpersonal communication for their functioning (e.g., Redding, 1973), an individual's level of communication apprehension, as well as his or her perceptions of the communication requirements of different occupations, may have significant effects on his or her perceived desirability of occupations and behaviors in terms of the choice of occupations.

Specifically, it was hypothesized that (a) high communication apprehensives perceive occupations requiring less communication as more desirable than occupations requiring more communication, while low apprehensives perceive occupations requiring more communication as more desirable than occupations requiring less communication, and (b) high apprehensives select occupations they perceive as requiring less communication than those selected by low apprehensives.

METHOD

Subjects and Instruments

Subjects were 196 undergraduate students enrolled in basic communication courses. All subjects completed the Personal Report of Communication Apprehension, as well as instruments designed to measure the desirability and communication requirements of 31 occupations and the perceived communication requirements of their own chosen occupation. The Personal Report of Communication Apprehension is a 20-item, Likert-type instrument that has had high reliability in previous research (McCroskey, 1970). The instrument yields a potential range of scores from 20 (low apprehension) to 100 (high apprehension). For this study low apprehensive was operationally defined as scores one standard deviation below the mean score, while high apprehensive was defined as scores one standard deviation above the mean.

The communication requirements and general desirability of occupations as perceived by subjects were measured through two instruments constructed for the purpose of this study. Thirty-one occupations were selected to represent a wide range of occupations in terms of both communication demands and status. For the measure of occupational desirability, subjects were instructed to respond to a 7-point, bipolar scale (desirable-undesirable) for each of the 31 occupations.

The measure of perceived communication requirements used the same 31 occupations. Subjects were instructed to respond to each occupation on a 1-7 scale, where 1 meant that the job "requires almost no communication," and 7 meant that the job "requires a great deal of communication."

As a final step in completing the study, subjects were asked to indicate the "occupation you have chosen, or would like to have for a career" and the perceived "communication requirements of that occupation utilizing the same seven-point scale as that above."

Data Analyses

The first step in the analysis of the data was the determination of occupations that could be classified as high or low in communication requirements. The overall mean estimate of communication requirements for the 31 occupations was 4.81, with a standard deviation of 1.91 ($n = 196$). Ten occupations were selected to form the high-communication occupation classification. Each of these occupations scored more than one-half standard deviation above the overall mean. The combined mean for these 10 occupations was 6.65. Occupations included were trial lawyer, salesman, public school teacher, counselor, bartender, social worker, industrial negotiator, politician, television newscaster, and actor. Fourteen occupations that scored more than one-half standard deviation below the overall mean were selected to represent the low-communication occupation classification. The combined mean for these 14 occupations was 3.09. Occupations included were mailman, statistician, computer programmer, farmer, assembly line worker, radiologist, research chemist, proofreader, accountant, landscape gardener, botanist, miner, house painter, and artist.

Next, high and low communication apprehensives were identified. The overall ($n = 196$) mean score on the instrument was 61.92, with a standard deviation of 13.97. The 38 subjects with scores above 75 were classified as high apprehensives and the 40 subjects with scores below 49 were classified as low apprehensives.

In order to (a) check the validity of the high- and low-communication requirements classification of the occupations after omission of the moderately apprehensive subjects, and (b) determine whether communication apprehension level produced a main effect or interacted with occupation level to affect perceived communication requirements of occupations, a two-way analysis of vari-

TABLE 1
ANALYSIS OF VARIANCE OF MEAN PERCEIVED
COMMUNICATION REQUIREMENTS
OF OCCUPATIONS

Source of variance	df	MS	F
Communication ap- prehension	1	.58	1.38
Subjects within groups	76	.42	
Occupation	1	508.31	1746.32*
Communication Ap- prehension \times Oc- cupation	1	.03	<1
Occupation \times Sub- jects Within Groups	76	.29	

* $p < .0001$.

ance with one repeated measure was performed on subjects' mean communication requirements scores for the occupations. One factor in the analysis was the communication apprehension level of the subjects (high or low). The other was the presumed level of occupational communication requirements (high or low, repeated measure).

The data on occupational desirability were also submitted to a two-way analysis of variance with one repeated measure. One factor in the analysis was the communication apprehension level of the subjects (high or low); the other was the level of occupational communication requirements (high or low, repeated measure). The dependent variable in this analysis was the subjects' mean perceived desirability of the occupations in the appropriate classification. Since the first hypothesis predicted a specific interaction in this analysis, and a significant interaction was obtained, planned, directional t tests of the hypothesized differences were performed.

The difference between the high- and low-apprehensive groups in perceived communication requirements of the subjects' own chosen occupations was examined by means of a t test. This provided a test of the second hypothesis.

RESULTS

The two-way analysis of variance of perceived communication requirements of the occupations (see Table 1) indicated that neither communication apprehension nor the interaction of occupation and communication apprehension had a significant impact on perceived communication requirements. The occupation variable did produce a significant effect, accounting for 90.3% of the total variance of the scores. As expected, the occupations classified as having high

communication requirements were perceived as requiring more communication ($M = 6.62$) than those classified as having lower communication requirements ($M = 3.00$). Since there was no significant effect for communication apprehension and no significant interaction of apprehension and occupation, and since the mean perceived communication requirements for the occupation levels were virtually identical to those observed for the entire sample, it was concluded that the occupation classification employed was satisfactory for use in the analysis of the data related to occupational desirability.

The two-way analysis of variance of perceived occupational desirability (see Table 2) indicated that communication apprehension did not produce a significant main effect. However, both occupational level and the interaction of occupation and communication apprehension did produce significant effects. The interaction effect was examined to determine whether the hypothesized relationship was present. Table 3 provides the relevant means. The difference in the means for the low apprehensives was in the hypothesized direction, and the difference was significant ($t = 7.68$, $p < .05$). The difference in means for the high apprehensives was very small (.10) and in the direction opposite to that predicted.

On the basis of the analysis it would appear that the first hypothesis was only partially supported. However, it seemed likely that the occupations chosen for study could have a general desirability bias confounded

TABLE 2
ANALYSIS OF VARIANCE OF MEAN PERCEIVED
OCCUPATIONAL DESIRABILITY

Source of variance	df	MS	F
Communication appre- hension	1	.59	<1
Subjects within groups	76	.89	
Occupation	1	29.83	47.48*
Communication Appre- hension \times Occupa- tion	1	22.73	36.18*
Occupation \times Subjects Within Groups	76	.63	

* $p < .0001$.

TABLE 3
OCCUPATIONAL DESIRABILITY MEANS AND STANDARD DEVIATIONS

Subject group	High communication occupations		Low communication occupations		Differences (high - low) <i>M</i>	Adjusted difference ^a <i>M</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Total sample (<i>n</i> = 196)	4.09	1.34	3.28	1.28	.81	
High apprehensives (<i>n</i> = 38)	3.62	1.37	3.52	1.40	.10	-.71
Low apprehensives (<i>n</i> = 40)	4.50	1.26	2.88	1.22	1.62	.81

^a Adjusted differences = subject group differences - total sample difference.

with level of communication requirements that obscured the hypothesized effect in the data analysis. In order to determine whether this was tenable, the means for the two occupational classifications were computed for the entire subject pool (*n* = 196) and the obtained difference was examined by means of a *t* test for correlated samples. The high-communication occupations were found to be perceived as significantly more desirable, $t(1, 195) = 9.01$, $p < .0001$, than the low-communication occupations. Thus it would appear that it was very possible that a general desirability bias was confounded with level of communication requirements in this study. When the mean differences in perceived occupational desirability for the two levels of occupation are adjusted for this constant bias, the precise relationship predicted in the first hypothesis is observed (see Table 3).

The second hypothesis was supported by the results of the analysis of the subjects' reported perceptions of the communication requirements of their own chosen occupation. Low apprehensives indicated significantly, $t(1, 76) = 4.06$, $p < .0001$, higher communication requirements in their chosen occupations ($M = 6.60$, $SD = 1.13$) than those reported by high apprehensives ($M = 5.59$, $SD = 1.09$).

DISCUSSION

Both hypotheses were supported. After an adjustment for a general desirability bias, results demonstrated clear preferences on the part of high apprehensives for occupations having low communication requirements and low apprehensives for jobs with high communication requirements. The finding in support of the second hypothesis is particularly meaningful in light of the fact

that the communication apprehension variable did not account for significant variance in perception of communication requirements of the other occupations in this study. This suggests that individuals can provide accurate descriptions of communication requirements of occupations, regardless of their apprehension level, but that their choice of occupations is strongly related to the level of their communication apprehension.

Overall, the results here indicate the strength of communication apprehension as a predictor of both attitude toward the desirability of occupations and the actual choice of occupation an individual will make. Although the present study has determined that there is a strong relationship between communication apprehension and occupational choice and desirability, there is continuing need for research concerning the role of communication apprehension subsequent to the individual's decision on a career. For example, it seems highly likely that an individual's level of communication apprehension may serve as a significant predictor of such important organizational variables as job satisfaction and job performance (e.g., Locke, 1970). It would be reasonable to expect that communication-apprehensive individuals would seldom be found in upper managerial positions, since these normally require a great deal of communication. The job interview setting may be especially appropriate for extended research as well. Interviewing is clearly an activity that requires a large amount of interpersonal communication (e.g., Stewart & Cash, 1974). Highly apprehensive individuals would probably not fare too well in such settings and consequently would be, in effect, punished for their communication apprehension.

by losing the job opportunity, the promotion, or the salary increase.

In the counseling environment research might demonstrate the effects of apprehension on client-counselor relations. For example, the client who seems withdrawn and uncommunicative may be suffering from a high level of communication apprehension. Similarly, the individual who tends to avoid self-disclosure is likely to be suffering from communication apprehension (e.g., Hamilton, 1972). The communication skills workshop, recently developed and reported by Arbes and Hubbell (1973), actually may be dealing more with high communication apprehensives than with what they termed "socially awkward" individuals.

REFERENCE NOTES

1. McCroskey, J. C., & Lepard, T. *The effects of communication apprehension on nonverbal behavior*. Paper presented at the Annual Convention of the Eastern Communication Association, New York, March 1975.
2. Wells, J., & Lashbrook, W. B. *A study of the effects of systematic desensitization on the communicative anxiety of individuals in small groups*. Paper presented at the Annual Convention of the Speech Communication Association, New Orleans, 1970.
3. Quiggins, J. C. *Effect of high and low communication apprehension on small group member source credibility and interpersonal attraction*. Paper presented at the Annual Convention of the Speech Communication Association, Chicago, 1972.

REFERENCES

- Arbes, B. H., & Hubbell, R. N. Packaged impact: A structured communication skills workshop. *Journal of Counseling Psychology*, 1973, 20, 332-337.
- Bordin, E. S., Nachmann, B., & Segal, S. J. An articulated frame work for vocational development. *Journal of Counseling Psychology*, 1963, 10, 107-116.
- Budner, S. Intolerance of ambiguity as a personality variable. *Journal of Personality*, 1962, 30, 24-51.
- Crites, J. O. *Vocational psychology: The study of vocational behavior and development*. New York: McGraw-Hill, 1969.
- Green, L. B., & Parker, H. J. Parental influence upon adolescents' occupational choice: A test of an aspect of Roe's Theory. *Journal of Counseling Psychology*, 1965, 12, 369-383.
- Hamilton, P. R. *The effect of risk proneness on small group interaction, communication apprehension, and self disclosure*. Unpublished master's thesis, Illinois State University, 1972.
- Korman, A. K. Self-esteem variable in vocational choice. *Journal of Applied Psychology*, 1966, 50, 479-486.
- Locke, E. A. Job satisfaction and job performance. *Organizational Behavior and Human Performance*, 1970, 5, 484-500.
- McCroskey, J. C. Measures of communication bound anxiety. *Speech Monographs*, 1970, 37, 269-277.
- McCroskey, J. C. The implementation of a large scale program of systematic desensitization for communication apprehension. *The Speech Teacher*, 1972, 21, 255-264.
- Oppenheimer, E. A. The relationship between certain self constructs and occupational preferences. *Journal of Counseling Psychology*, 1966, 13, 191-197.
- Phillips, G. M. Reticence: Pathology of the normal speaker. *Speech Monographs*, 1968, 35, 39-49.
- Redding, W. C. *Communication within the organization: An interpretative review of theory and research*. New York: Industrial Communication Council, 1972.
- Stewart, C. J., & Cash, W. B. *Interviewing: Principles and practices*. Dubuque, Iowa: Wm. C. Brown, 1974.

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