

The Visitor

Devoted to the Interests of Agricultural Education in Minnesota Schools

Vol. LXII

October, 1975

No. 4

WHAT TURNS AG MEN ON?

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Since the turn of the century, guidance personnel have been aware of the concept of matching people to jobs — the notion that the key to job success lies in the ability to place a person in a job situation for which that person is qualified.

Research has produced "tools" which evaluate a person's capabilities for an occupation, e.g., the General Aptitude Test Battery (GATB). Recently, more attention has been given the "needs" a person has, and the necessity of these needs being filled through work. Many individuals do not remain in an occupation for which they appear "suited" i.e., satisfactory; even though their abilities closely match the job requirements, they choose to leave that work environment. This might be labeled the "satisfaction factor" as contrasted to the "satisfactoriness factor" which relates to job aptitudes and capabilities, and on-the-job performance.

Considerable progress has been made in developing instruments for measuring variables concerning job satisfaction and satisfactoriness. Some instruments now available for assessing individual vocational needs and abilities include: 1) The Minnesota Satisfaction Questionnaire (MSQ) which measures how work satisfies an individual; 2) The Minnesota Satisfactoriness Scales (MSS) which measure how satisfactorily individuals perform; 3) The Minnesota Importance Questionnaire (MIQ) which measures an individual's vocational needs; and 4) The Minnesota Job Description Questionnaire (MJDQ)

which measures the reinforcers (rewards) jobs provide.

The MJDQ and MSQ provide information useful in working with students concerning their career development by identifying job reinforcer characteristics. The Minnesota Importance Questionnaire (MIQ) makes information from the MJDQ and MSQ more valuable when working with students, as it provides a direct measure of vocational needs by measuring and ranking 20 vocationally relevant need dimensions.

Scores from the MIQ can be analyzed, then compared with scores for other occupations. An occupational reinforcer pattern (ORP) describes a job environment in terms of factors which satisfy the vocational needs measured by the MIQ. The ability of the MIQ to measure vocational needs which can be compared with the reinforcing characteristics found in a specific work environment are unique. No other instrument presently available allows direct matching of needs and the reinforcers found in a work environment, thereby yielding a prediction of individual satisfaction on the job.

Research on the topic of worker satisfaction has been a major concern of the Work Adjustment Project (WAP) at the University of Minnesota. The WAP has concentrated along two fronts to develop better ways to match people with occupations by: assessing vocational abilities and matching these with the ability requirements needed for successful occupational performance, and assessing vocational **needs** (preference for those characteristics of a job which are satisfying); then matching that individual's needs with the **occupational reinforcers** (characteristics of a job that cause satisfaction or dissatisfaction) for a given occupation. There seems to be substantial implicit agreement that a "good fit" between the individual and his environment facilitates individual adjustment.

The terms satisfactoriness and satisfaction describe the degree of success achieved in maintaining "correspondence" between an individual and the work en-

vironment. Work "correspondence" can be described in terms of the individual's fulfilling the requirements of the work environment, and the work environment fulfilling the requirements of the individual. This correspondence is a continuous process: it is termed "work adjustment". If a person reaches a stabilized state of correspondence, he or she is likely to remain on the job and obtain tenure. **Satisfactoriness** is an external indicator while **satisfaction** is an internal indicator of correspondence. Work personality-work environment correspondence can be used to: 1) Predict satisfaction and satisfactoriness which are indicators of correspondence in the work adjustment process; and 2) Predict job tenure.

In order to predict tenure, satisfactoriness and satisfaction must be measurable and predictable. Basically, this is done through a two-step process: 1) Ability requirements are established by studying **satisfactory** workers with substantial tenure; 2) Reinforcer systems are established by studying **satisfied** workers with substantial tenure.

The research framework of the WAP permits measurement of individuals and work environments explicitly, independently, and on a comparable measurement scale, thus permitting prediction of job satisfaction in advance of employment. Such a method of matching people and jobs has distinct promise for use in vocational counseling or personnel placement.

The purpose of the study was to determine what work environment factors appeal to ag teachers. This was done by collecting data and constructing Occupational Reinforcer Patterns (ORPs) for high school and adult vocational agriculture instructors.

Participants for the study were chosen from among the 487 Minnesota agriculture teachers employed in 1970-71. Two subgroups were surveyed: 1) 68 High School (HS) Instructors, and 2) 41 full-time Adult Farm Management (FM) Instructors.

Selection was based on the factors of success in teaching and experience. The experience factor selected participants on the basis of tenure; this limited eligibility to those in the occupation for at least three years. Success — a subjective factor — was intended to select satisfied, satisfactory individuals. FM participants were selected by the University's Ag Ed teacher trainer, while the high school group was selected by the state Ag Ed supervisor. All

individuals designated as meeting the dual criteria were contacted for the study.

A copy of the Minnesota Job Description Questionnaire (MJDQ) (which contains the short form MSQ) and a letter of explanation were mailed to each participant. Completed questionnaires were scored and analyzed by the Work Adjustment Project. A D^2 Comparative Value for the two occupations was then calculated to facilitate comparison of the ORPs on a quantitative basis.

THE RESULTS

Descriptive Characteristics of ORPs

Each completed MJDQ provides data which helps establish the Occupational Reinforcer Patterns (ORPs) for an occupation described in Table 1.

Table 1.

Scale	MJDQ Statement Workers on this job. . .
1. Ability utilization	1. make use of their individual abilities
2. Achievement	2. get a feeling of accomplishment.
3. Activity	3. are busy all the time.
4. Advancement	4. have opportunities for advancement.
5. Authority	5. tell other workers what to do.
6. Company policies and practices	6. have a company which administers its policies fairly.
7. Compensation	7. are paid well in comparison with other workers.
8. Co-workers	8. have co-workers who are easy to make friends with.
9. Creativity	9. try out their own ideas.
10. Independence	10. do their work alone.
11. Moral values	11. do work without feeling that it is morally wrong.
12. Recognition	12. receive recognition for the work they do.
13. Responsibility	13. make decisions on their own.
14. Security	14. have steady employment.
15. Social service	15. have work where they do things for other people.
16. Social status	16. have the position of "somebody" in the community.
17. Supervision — human relations	17. have bosses who back up their men (with top management).
18. Supervision — technical	18. have bosses who train their men well.
19. Variety	19. have something different to do every day.
20. Working conditions	20. have good working conditions.
21. Autonomy	21. plan their work with little supervision.

Since not all reinforcers are expected to be found in a given work environment, and since reinforcers can be present at various levels in different environments, the MJDQ is designed to yield an estimate of magnitude of reinforcement as well as judging its presence.

Figure 1 shows an ORP profile for HS and FM instructors. The profile for HS shows that Social Service, Ability Utilization, Responsibility, Creativity, Security, Autonomy, Achievement, and Activity are **descriptive** reinforcer characteristics of the occupation, while Authority and Technical Supervision are characteristics **not descriptive** of the occupation. (See Table 1 for explanation of terms.)

In addition, the ORPs profiles indicate the degree to which reinforcer characteristics are descriptive. Highly descriptive reinforcers (in either a positive or negative sense) are indicated by the symbol \ominus ; characteristics which are moderately descriptive are indicated by the symbol \odot .

For example, in the HS ORPs profile, descriptive reinforcer characteristics are found on both the positive and negative side of the scale. For HS instructors, **Social Service** is considered a highly descriptive **positive** reinforcer characteris-

tic, while **Authority** and **Technical Supervision** are moderately descriptive **negative** reinforcer characteristics. This indicates that an important job reinforcer characteristic for HS instructors is having "work where they do things for other people" (Social Service), but HS instructors are less likely to "tell other workers what to do" (Authority), or to have "bosses who train their men well" (Technical Supervision).

Of the ten descriptive reinforcer characteristics for HS instructors, one (Social Service) rated as highly descriptive while the other nine rated moderately descriptive. Of the ten, eight are positive and two — Authority and Technical Supervision — are negative reinforcers (not descriptive).

FM instructors had eight descriptive reinforcer characteristics, six of which — Responsibility, Ability Utilization, Autonomy, Achievement, Social Service, and Authority — are highly descriptive. Creativity and Technical Supervision rated as being moderately descriptive reinforcer characteristics of the occupation. As in the case of HS instructors, Authority and Technical Supervision are negative descriptive reinforcer characteristics; the remaining six are positive.

Figure 1 — Occupation Reinforcer Patterns Profiles for High School and Adult Agricultural Instructors as Measured by the Minnesota Job Description Questionnaire

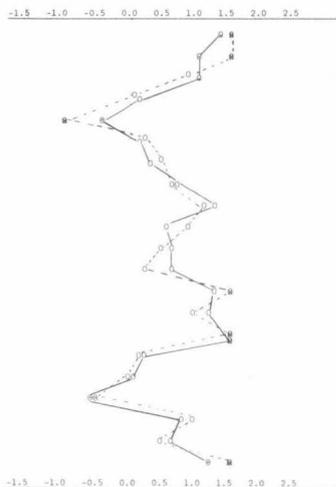
1. Ability utilization
2. Achievement
3. Activity
4. Advancement
5. Authority
6. Company policies
7. Compensation
8. Co-workers
9. Creativity
10. Independence
11. Moral values
12. Recognition
13. Responsibility
14. Security
15. Social service
16. Social status
17. Supervision — human relations
18. Supervision — technical
19. Variety
20. Working conditions
21. Autonomy

\ominus Highly descriptive characteristic

\odot Moderately descriptive

—— High School Instructors

----- Adult Farm Management Instructors



In addition to the profile for each job, a list of descriptive phrases for each profile is obtained from MJDQ data. These descriptive phrases are selected and classified as either highly or moderately descriptive on the basis of: 1) Their absolute scale value; 2) Consensus among respondents about the presence or absence of the reinforcer in the occupation.

A descriptive phrase is termed **highly** descriptive of the occupation only if three conditions are met: 1) It has an adjusted scale value equal to or greater than 1.5; 2) At least 90 percent of the teachers agree that the statement describes the job; 3) The estimated overlap between the number of votes for the statement and the number of votes for the neutral point was less than or equal to 15 percent.

Descriptive reinforcer characteristic phrases for ag teachers came out to be:

- A. Adult farm management instructors:
- 1) make decisions on their own
 - 2) make use of their individual abilities
 - 3) plan their work with little supervision
 - 4) get a feeling of accomplishment
 - 5) have work where they do things for other people
 - 6) do not tell other workers what to do
 - 7) try out their own ideas
 - 8) do not have bosses who train their men well
- } highly descriptive
- B. High school vocational agriculture teachers:
- 1) have work where they do things for other people
 - 2) make use of their own individual abilities
 - 3) make decisions on their own
 - 4) try out their own ideas
 - 5) have steady employment
 - 6) plan their work with little supervision
 - 7) get a feeling of accomplishment
 - 8) are busy all the time
 - 9) do not have bosses that train their men well
 - 10) do not tell other workers what to do
- } moderately descriptive

The two sets of descriptive phrases are similar — all eight of the phrases which describe the occupation of FM instructor are found in the list of ten which describe the occupation of HS instructor. Such similarity indicates that the two jobs are alike in their reinforcer characteristics.

The occupation of ag instructor was

then compared to other occupations. Table 2 shows a D^2 value for the occupations of HS and FM instructors compared to nine job clusters: 1) Professional Technical, 2) Semi-professional Technical, 3) Service Sales, 4) Social-Education Service, 5) Business Detail Service, 6) Personal Service, 7) Building Trades Manual, 8) Manufacturing Manual, and 9) Service-Maintenance Manual Occupations. A low D^2 value indicates similarity, a high D^2 value indicates less similarity.

Table 2.
 D^2 Comparison Value for High School and Farm Management Instructors with Nine Job Clusters

Occupational Job-Cluster	D^2 Value	
	HS	FM
1. Professional technical	4.59	6.92
2. Semi-professional technical	3.78	5.40
3. Service Sales	4.52	4.91
4. Social-education Service	1.77	2.86
5. Business Detail Service	6.70	9.49
6. Personal Service	6.26	8.00
7. Building trades Manual	7.21	9.08
8. Manufacturing Manual	11.56	12.91
9. Service-Maintenance Manual	4.63	6.23

Both HS and FM instructors had the lowest D^2 value when compared to Job Cluster 4, Social-Education Service Occupations, a cluster that contains "educator-type" occupations e.g. elementary, secondary, and vocational teachers. (As contrasted to this apparent close identification with cluster 4, both groups had high D^2 values for cluster 8, Manufacturing Manual Occupations.)

After cluster 4 was identified as being similar, a D^2 value was calculated for each of the nine occupations within the cluster: caseworker, school counselor, vocational rehabilitation counselor, vocational instructor, librarian, occupational therapist, physical therapist, elementary teacher and secondary teacher. Interestingly enough, both groups again agreed (as indicated by lowest D^2 value) most closely with one occupation — that of school counselor ($D^2 = 1.5$).

CONCLUSIONS

The major goal of this study was to identify those characteristics of the occupations of farm management instructor and high school instructor that are reinforcing, and lead to job satisfaction for

those engaged in that occupation.

The results were summarized in the form of Occupational Reinforcer Pattern profiles, and in a list of descriptive characteristics. Adjusted scale values on each of 21 scales were used to calculate a D^2 comparative value for each of nine job clusters and nine distinct occupations.

The results indicate that the occupations of adult farm management instructor and high school vocational education in agriculture instructor have certain identifiable reinforcer characteristics, and that the characteristics are similar. Eight common descriptive reinforcer characteristics were found.

Adult farm management instructors seem to exhibit a somewhat more definite attitude on those reinforcer characteristics they identify, as indicated by the number of "highly descriptive" characteristics on their ORPs with FM instructors having six reinforcer characteristics designated "highly descriptive" while HS instructors had one.

The 8-10 descriptive statements given for these occupations suggest the most important characteristics of each occupation, a source of occupational information for counseling. It would appear that the two occupations provide a similar reinforcer system, and a person satisfied with one occupation would likely be satisfied with the other.

The ORPs for both occupations show a high degree of correlation with the descriptive characteristic, indicating a high level of agreement among teachers in both comparative judgement and categorical judgement of reinforcer characteristics of their occupation. Of the nine reinforcing characteristics shown on the ORPs for the FM instructors, only one was not listed as being a descriptive characteristic of that occupation; all ten of the characteristics identified as being reinforcers for the HS instructors were listed as descriptive. This would imply that Ag teachers agree on the presence of reinforcer characteristics.

Comparing the occupations of HS and FM instructor resulted in a low D^2 Value, indicating the two jobs are similar in reinforcer characteristics. These occupations show a similarity to occupations listed under the title, "Social-Education Service Occupations," implying that HS and FM instructors' occupations have reinforcer characteristics similar to theirs. It is interesting to note that the D^2 values suggest a strong correlation with that of

counselor, an activity often performed by ag teachers.

Additional Research Needed

Further research needs to be conducted to identify reinforcer characteristics of the many off-farm agricultural occupations as guidance personnel contact a small number of potential ag instructors yet contact many potential employees for off-farm occupations, and counseling toward semi-professional occupations deserves greater emphasis. Through the use of the MJDQ it would be possible to survey more occupations and develop ORPs for use in guidance.

Research needs to continue to refine the tools used in determining reinforcer characteristics since the MJDQ may not discriminate among closely allied jobs such as the two in this study. More research is needed to explore the possibility of identifying additional characteristics which may be reinforcing to various groups of people. It would also be of interest to survey managerial-type occupations and observe their reinforcer characteristics.

The **Theory of Work Adjustment** holds promise for guidance and career development personnel now working with students in secondary and post-secondary schools. It also represents another effort to better "match" people to jobs in order to improve worker satisfaction and satisfactoriness.

VOL. LXII THE VISITOR No. 4

Published quarterly during the calendar year in January, April, July and October by the Division of Agricultural Education University of Minnesota, St. Paul, Minn. 55108

Second class postage paid at St. Paul, Mn.

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