Organizational effectiveness is composed of two concepts: (1) job satisfactions and (2) employee performance. In this paper the concept of job satisfactions is delimited to include five principal areas, viz., work, pay, promotion, people, and supervision. Employee performance is the reciprocal concept. This paper is directed toward the job satisfactions area. This paper explores one facet of the more comprehensive study of Interuniversity Council (IUC) libraries. Its purpose is to compare and contrast two major divisions of the largest of the IUC consortium libraries. The goal is to study the laws relating situations, personal characteristics, and policies to satisfactions and to behavior. The library studied is divided into its two functional halves: (1) Public Services Division and (2) Technical Services Division. It was found that Public Services employees in this library are happier than their counterparts in Technical Services. Each of the five principal areas of job satisfactions are explored for each division of the library. (Related studies are: LI003816 through 003819 and LI003821.) (Author/NH)
A STRUCTURAL ANALYSIS OF THE DETERMINANTS OF JOB SATISFACTIONS IN ON-GOING ORGANIZATIONS

by

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and

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A STRUCTURAL ANALYSIS OF THE DETERMINANTS OF JOB SATISFACTIONS IN ON-GOING ORGANIZATIONS

Introduction

There is no unified agreed upon structure for satisfaction theory. This paper will add some structure to satisfaction theory and also explore some of its dimensions. In those cases, by far the majority, where consensus has not evolved opinions are still in flux, polarizing sporadically around a variety of distinct answers which indicate a diversity of thinking seldom experienced in other, more settled areas of inquiry.

It is seldom possible to specify which, if any, observable behaviors should arise as a consequence of a particular attitude (or vice versa), and with which behaviors a purported measure of such an attitude should be correlated, either because of the limitations of available theory or because, in fact, attitudes may be conscious states with no inevitable behavioral consequences. One of the basic problems in attitude theory is specifying how, or if, attitudes and behavior are related at all, either causally or coincidentally.

Figure 1 illustrates, in highly abbreviated fashion, an outline or

Figure 1
A Model of Organizational Effectiveness

schema of the complex forces constituting the areas of concern facing management in any type of organization. The model is essentially self-explanatory.

In order to more fully understand the concept of organizational effectiveness, the constituent parts of Figure 1 can be studied to advantage.

*This is the fifth of a series of articles reporting results of the North Texas State University Research Studies in Job Satisfaction. This research is financed by a North Texas State University Faculty Research Grant made to Dr. J. D. Dunn.
We can define organizational effectiveness as that state of affairs which exists in any type of organization (civil, military, ecclesiastical) when the total array of resources available to the organization (men, material, money) is being employed efficiently to accomplish the goals and objectives of the organization without undue depletion and exhaustion of those resources. This definition is of necessity only a partial explanation of the concept of organizational effectiveness. A complete explanation of this extremely important managerial concept would require several chapters of exposition, each chapter exclusively concerned with one of the sub-topics implicit in the definition. For our purposes such an exhaustive evaluation and exposition of the concept would be completely superfluous.

What should be emphasized in Figure 1 is the global nature of the concept of organizational effectiveness. The meaning of this concept can only be discovered through an examination of the dual concepts of which it is composed: 1) Job Satisfactions; 2) Employee Performance. In this paper the concept of Job Satisfactions is delimited to include five principal areas, viz., work, pay, promotion, people, and supervision. The term job satisfactions can be defined as the feelings an employee experiences about his job. These psychological states-of-mind are extremely important, both from the viewpoint of the employee and from the perspective of management. The concept of employee performance is the reciprocal concept. How an employee feels about his job is only one (albeit very important) area of managerial concern. How an employee performs on the job is an equally legitimate area of managerial concern. Taken separately and in isolation the dual concepts of employee satisfactions and employee performance are completely meaningless. Each concept takes on meaning and significance only when both concepts are viewed as co-existent phenomena. The dual con-
cepts form a single polarity. We can label this polarity managerial
effectiveness. The bipolar regions constituting the dual make-up of this
"managerial dynamic" have been extensively studied and analyzed. In this
paper chief attention will be directed to only one pole of interest: the
job satisfactions area.

The Study

The investigators have described in great detail the study which under-
lines this paper. Other articles have been written which have examined the
problem of organizational effectiveness in the context of job satisfactions
experienced in several areas of the work setting. In brief, the study
encompasses fourteen libraries constituting the membership of the Inter-
university Council (IUC) consortium. A pilot study was run on the largest
library of this group. This library is referred to as Library A, in order
to honor agreements vis-à-vis anonymity and confidentiality. Six libraries
were studied intensely. The investigators have published partial findings
of these pilot studies in other articles. As the data is processed by
computer the findings and conclusions are integrated, compiled, and published
as a series of continuing papers.

Limitations of This Paper

This paper will explore only one facet of the more comprehensive
study of IUC libraries. More specifically, this paper will examine two
major divisions of Library A, the largest of the IUC consortium libraries.

Figure 2 illustrates the formal organizational schema of Library A.

Figure 2
Simplified Organization Chart of Library A

It will be the purpose of this paper to compare and contrast the two divi-
sions of Library A. Again, we are purposely limiting our investigation to the job satisfactions "box" of our model (see Figure 1). The hypothesis is that differences among structurally distinct areas of the organization will be found to exist in one or more categories of job satisfactions. Note that this hypothesis is the opposite of the null hypothesis. The latter hypothesis assumes that no relationships can be predicated upon mere structural diversity in an organization. Our hypothesis, the alternate hypothesis, challenges the null hypothesis and examines the data in order to lay the groundwork for confirmation or reargument of the null hypothesis.

Why Bother to Investigate Satisfactions?

We want to measure satisfactions primarily because we want to be able to establish a general theory that will serve as a basis for practical action, i.e., our research results should have major utility for the managing staff of on-going organizations. The desirability of establishing a general theory of satisfactions is evidenced by the wide variety of publications in this area and by the expressed interest in industrial, governmental, and private agencies in research on satisfaction. The reasons why the importance of this research is recognized are easy to find. Understanding the sources of satisfaction and dissatisfaction is important in itself, whether it concerns satisfactions on the job or in retirement. It has important implications for mental health as well. And, from the purely industrial point of view, much of the concern of management and unions with areas such as supervisory training, organizational structure, job enrichment, automation, level and method of payment, retirement-age policy, is based on the assumption that such factors affect
the feelings and attitudes and, in turn, the behavior of employees. It was the desire to find a basis for evaluating organizational effectiveness as a correlate of job satisfactions across a wide variety of situations that motivated this present series of studies.

It has been on the basis of this presumed influence of satisfaction upon behavior that much of the research on satisfaction with both present employees and retirees has been "sold" to management. The assumption has been that changes in attitude will be reflected through increased productivity and improved profit-and-loss statements. Early hypotheses stated that satisfaction on the job was related directly to productivity—that the happy worker was the productive worker. It soon became apparent that such a simple formulation was inadequate, and we feel that it is unlikely that any simple relationship between satisfaction and productivity will be found generally. No really substantial, reliable, or general correlation between satisfaction and productivity has been established. The null hypothesis continues to reign supreme in this area. It is evident, moreover, that satisfaction with such aspects of policy as fringe benefits or retirement policy, which are remote from workaday reality, is unlikely to be reflected directly and simply in productivity. The practical decision-maker, nevertheless, continues to behave as if he hopes that, somehow, improved attitudes will be accompanied by improved behavioral patterns.

It is not only the policy-maker who is interested in understanding the determinants of satisfaction. The management theoretician interested in human motivation is equally concerned, since he wishes to understand the laws of human behavior and attitudes. Much of our research work has been done in the working (on-going) situation, because the job situation furnishes a first-rate laboratory for the study of human attitudes and
behavior. The investigators were very fortunate in gaining entree to Library A and the other libraries in the IUC consortium. Library A is a well-functioning organization which has served this study well as an experimental laboratory in which certain hypotheses have been examined. The working situation in most on-going organizations is relatively well controlled without being artificial. The study of satisfaction will contribute to the general psychology of motivation, preferences, and attitudes. Laws obtained in the job context may well generalize quite widely to other areas of preferences, as a special case of the broader problems involved in the measurement of attitudes. A comprehensive treatment of the vast literature in attitude theory and measurement is beyond the scope of this paper. The investigators focused on selected structural divisions of Library A which seemed most relevant to our task, but we do consider that our selective work in this managerial area of concern is relevant to the broader domain of studies of attitudes in general.

And of course we should not forget that the improvement of satisfaction is of humanitarian value. Trite as it may seem, satisfaction is a legitimate area of concern in itself. The topic, therefore, is of general importance. The necessity for measuring satisfaction follows directly from the importance of the topic. In the next section we shall discuss an instrument for indexing job satisfactions which is becoming quite popular.

**The Instrument Used to Measure Job Satisfactions In Library A**

An instrument, if it is to be of any worth in studying job satisfactions, must undergo a thorough and competent scientific analysis and scrutiny. We have to set up very stringent requirements for the devices we use to measure the variables we are to study. Our goal is to study the
laws relating situations, personal characteristics, and policies to satisfactions and to behavior. The measures constructed as attitude scales must be applicable to a wide variety of persons on a variety of jobs and in a variety of situations. Specifically, the verbal level of the measures should be low enough that they can be given to almost any employable worker. They should be inexpensive in terms of time and money. They should be standardized so that they are comparable from person to person, both in administration and in interpretation. This last requirement means that there should be norms available indicating the responses of people in comparable situations. They should separate the various aspects of satisfaction, so that feelings about pay, for example, are not lumped with feelings about supervision. Of course, they should be reliable in that there is reasonable consistency from question to question and from time to time. And they should be valid, agreeing with other, supposedly equivalent, measures, and with a generally accepted intuitive understanding of what is meant by satisfaction.

The requirement of low expenditures of time and money specified both that the measuring devices be short and that they can be administered in groups, eliminating the need for interviews. Short pencil-and-paper checklists seem ideal.

Standardization requires not only clear instructions and format, but also the compilation of data for the kinds of people for which comparisons must be made. For example, stratification norms for satisfactions on the job should enable one to compare different workers by reference to distribution functions or density functions which provide, in their structural characteristics, the frames of reference constituting the analytical parameters of interest. In particular, density functions can easily be con-
structured from the normative tables (distribution functions) which, in turn, can powerfully assist investigators in making valid generalizations about overall trends and patterns in satisfaction data.

Patricia Cain Smith has developed the Job Descriptive Index (JDI) as the "payoff" of ten years of intensive studies called The Cornell Studies of Satisfactions. The JDI is an eminently usable and practical instrument for measuring satisfaction. The authors have described the JDI in great detail in other articles. Briefly, it is a small test booklet of five pages which covers five areas, viz., work, pay, promotion, supervision, and people. It is easily administered and scored. An employee can fill the JDI out in about five minutes. Scoring templates are easily constructed which facilitate the scoring of the JDI questionnaires. Once the JDI's are scored it is a simple matter to enter the data upon IBM (or other computer) master work sheets as the first of the preliminary steps involved in computer analysis of the data.

Analysis of the Data in Library A

The steps described in the preceding section were followed in the pilot study conducted in Library A. The target areas of interest were the two major divisions of the library. The investigators believed that, by structuring the data in this way, the differentiability of job satisfactions could be quickly and easily assessed. In the sequel this assumption proved amply justified.

In Figure 3A the data is divided into two broad groupings. These

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Figure 3A
Comparative Analysis of Job Satisfaction in Six JDI (Component) Categories, Using Two Divisional Categories
As the Principle of Stratification

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groupings reflect the major organizational split of Library A into its
two functional halves: 1) Public Services Division; 2) Technical Services Division. The data in Figure 3A are further structured in two additional ways in order to present the results of the analysis as concisely as possible. The five areas of the work situation (work, pay, promotion, supervision, people) are arranged in descending order within each major division. The two major divisions, in turn, are arranged in descending order. This configuration of the data allows a convenient, comparative analysis of the numbers to be made, without the necessity of further subdivisions or secondary compartmentalizing of the figures.

The first feature that becomes noticeable in Figure 3A is that Public Services employees in Library A are happier than their counterparts in Technical Services. The percentage figures in Figure 3A were obtained by computing a composite (N=67) average for the two major divisions of Library A for each of the five JDI categories of job satisfaction and then, in turn, computing the proportion of employees who fell above this composite average for each of the two major divisions. For example, 69.26% of the employees in the Public Services Division in Library A scored above the composite mean on the work scale of the JDI. The comparable figure for the employees in the Technical Services Division is 68%. In each instance the benchmark figure serving as the basis of comparison is the composite mean for the specific JDI work category. As a matter of interest the JDI (total) figures are also listed. The same principle of interpretation applies to the total as to the other five components of the JDI.

Public Services employees are "turned on" by four dimensions of their job, viz., work, promotion, supervision, and people. The order listed is the degree to which these employees are "turned on." They are relatively indifferent about their pay. A larger proportion of the Public Services
Division (68.69%) score above the composite total mean than do the employees of the Technical Services Division (52%). The strengths of the Public Services Division definitely lie in the areas of work and promotion. Pay policies and practices are of concern to the Public Services Division employees, as shown by the figure (51.18%) for this category of the JDI schema.

Technical Services Division employees are "turned on" by co-workers (people), the work (itself), and supervision. They are "turned off" by pay and promotional policies and practices. The low figures for pay and promotion satisfactions (46% and 26%) are directly in line with the findings of many studies in the literature to the effect that pay and promotion (satisfactions) are lowest both for males and females. If we set the theoretical "point of indifference" at 50% (a reasonable assumption, from the viewpoint both of statistical theory and empirical reality), then the low percentage figures for pay and promotion (both falling well under the 50% benchmark) tell us that group morale could stand some improvement, at least in these areas of the work setting. The statistically expected figures from a balanced attitude resulting in equal probabilities of endorsing favorable and unfavorable items on the pay and promotion scales are centered about the 50% benchmark. More research needs to be done to determine why attitudes differ to the degree they do in the two major divisions of Library A.

Viewed compositively the two average personalities defined by the composition of (attitudinal) forces in Figure 3A do show striking differences, as well as similarities. For it is evident that the composite or average employee in Public Services is not the same individual as the composite employee in Technical Services. It is interesting from this standpoint
to compare the rank-order of satisfactions as defined by the composite employee in each of the two major divisions of Library A. The Technical Services employee's profile of job satisfactions closely resembles the rank-order profile of the composite employee studied by Patricia Cain Smith.

An examination of Figure 3B reveals that the typical employee in

<table>
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<th>Figure 3B</th>
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<td>Relative Importance and Relative Satisfactions of Job Areas For Selected Employees in the Work Force</td>
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</table>

Patricia Cain Smith's nationwide sample (N=3,600) is not altogether consistent in reporting what he expects from his job. Column 1 lists the rank-order of importance to the employee of the five areas, as reported verbally by him during the Smith series of interviews. But when the employees were quizzed by means of the JDI instrument, the story changes drastically, as shown by the rank-order of job satisfactions in Column 2 (Figure 3B). This example is very important because it shows what can happen if management relies on the verbal expression of the employee to describe his feelings about his job. It was primarily because of this discrepancy discovered in pilot studies by Patricia Cain Smith between verbal reports of job feelings and the more scientific assessment of employee feelings by means of researched attitudes questionnaires that researchers first became aware of the magnitude of the measurement problem in this area. For it is true that the only scientific way to establish the true rank-order of satisfactions is by means of the administration of test questionnaires. Statistical analysis can then be applied to the test returns to determine the actual, as contrasted with the professed attitudes of the employees.
Figure 3B must be interpreted on the basis of the assumption that the order of importance and the order of satisfactions should, theoretically at least, be identical. This assumption is founded on the belief that what an employee values most (order of importance) should offer him the highest satisfaction (order of satisfactions). Patricia Cain Smith found substantial differences between the order of importance shown in Figure 3B (Column 1) and the order of satisfaction shown in Column 2. In the Smith study pay is most important, and yet it has nearly the lowest average satisfaction score. Promotions, on the other hand, have the lowest average satisfaction score but are also judged the least important (we can say that, on the promotion scale, the verbal professions and the actual feelings of the employees were identical—an event noteworthy more for its rarity than for its occurrence in research studies of this nature). Greatest satisfaction and median importance are expressed with coworkers. The order of importance and satisfaction appear to be in close agreement for work (quite high) and supervision (quite low).

In the Dunn and Vaughn study the agreement between order of importance and order of satisfactions is remarkably close. The first two categories (work and coworkers) are inverted, but the last three categories (supervision, pay, and promotion) are in exact agreement. Such an occurrence is rare. We can hypothesize that the reason for such close agreement of the Dunn and Vaughn study with the Smith study is because of the similar backgrounds of the employees in the two samples. It must be remembered that Column 4 in Figure 3B is based on the Technical Services Division and does not reflect the rank-order of satisfactions existent in the Public Services Division of Library A. There is enough difference in the rank-orders of importance and satisfaction vis-à-vis the two major library
divisions to warrant the thorough investigation of the underlying reasons and causes. The authors are currently analyzing this problem in connection with another structural investigation of the major differences and similitudes existing among 6 libraries of the IUC consortium.

If the data in Library A is restructured in a slightly different way (Figure 3C) we can view it from yet another standpoint—this time in terms of the constituent satisfactions experienced by the employees. For many purposes this is the best way to structure the data. For here we can compare the satisfactions on a one-to-one correspondence basis vis-a-vis the two major divisions. Any differences or similitudes which emerge can be explained on the basis of facts known to exist or conditions obtaining in Library A which make for the specific composition of attitudes shown.

In the people category of satisfactions (Figure 3C) Technical Services is polarized in the positive direction to a somewhat stronger degree than Public Services (68% versus 59.51%). This is really a surprising finding since one would naturally infer that the Public Services employees, from the very nature of their jobs which normally require a great deal of dealings with the public, would exhibit a higher percentage figure in this attitude scale than would their counterparts in the Technical Services Division. But note here that the people category applies strictly to the employee's peer group, i.e., coworkers and not to the "people" category label which might be (mistakenly) applied to the "public" whom the Public Services Division serves. If this distinction is rigidly observed then the People finding favoring the Technical Services Division
is not so surprising, after all! We must look at the other categories of satisfactions to find the answer.

In the work category of satisfactions (Figure 3C) Public Services leads the way (65.26% to 56%). Evidently the work (itself) is more appealing in the Public Services Division. The investigators are at a loss to explain this finding, without an extensive foray into the organization in terms of job analysis, etc. One thing is certain: if the work in Public Services is, by popular employee opinion (and Figure 3C gives us a rough gauge of this opinion) more "glamorous" or more desirable than the work in Technical Services, then managerial attention should be directed to this problem in order to bring the two percentage figures on a more equal par. The authors have started a pilot study in Library A to get at the roots of this problem, using a newly developed technique employing the Position Analysis Questionnaire (PAQ). The description of this research tool is beyond the scope of the present paper. We hope to report on the results of this study in future articles, as the data is collected and analyzed.

The Public Services Division (Figure 3C) has relatively more employees satisfied with supervision (59.52% to 54%). This should be of serious interest to Library A's management since the "halo effect" sometimes carries over from one satisfactions area to other areas. Dissatisfactions experienced with supervision can "carry over" to the other categories of the work setting and distort the figures to such a degree that comparative analysis is sometimes severely hampered. If the dissatisfactions with the supervision evidently experienced by Technical Services employees cannot be satisfactorily explained then it would be wise to monitor this job satisfaction area in future studies to determine if the trend is up or
down. If a static condition is found to exist then a more rigorous investigation is certainly in order. The present managers in the Technical Services Division are in an excellent position to assess their strengths and weaknesses and can direct the researchers in the more promising directions of inquiry to settle this curious question.

Public Services employees (Figure 3C) are more satisfied with pay (51.18% to 46%). This finding can be explained rather simply by a comparative analysis of the pay schedules governing each of the two major divisions of Library A. Presumably such a study will show somewhat higher levels of pay (on the average) for the Public Services Division employees. This appears logical since one of the main-line functions of the Public Services Division is to service the public, a function requiring skills and knowledge and expertise not possessed by the typical employee in Technical Services. One of our analyses showed that some of the Departments in Technical Services were lower-paid than comparable departments in Public Services. The reasons for the differences in pay detected are not obvious to these investigators but could no doubt easily be explained by the management of Library A, in light of the requirements, qualifications, etc., of the respective jobs involved in the two divisions. Here again, we need to run PAQ studies to get at underlying composition of job factors and job conditions in order to fully understand the forces at work in Library A. Only by fully exposing the underlying framework of conditions can adequate managerial techniques be developed to cope with the major forces at work in the library.

The situation with regard to promotion satisfaction (Figure 3C) reveals major dissatisfaction of Technical Services personnel (64.74% to 26%). The difference in employee satisfactions in this area is of a greater
magnitude than in any other area of job satisfactions. Clearly, the
attitudes of employees in the Technical Services Division have sharply
polarized about the "unfavorable" pole. A majority of Technical Services
employees feel that there are many deficiencies in the policies and practices
governing promotions in their division. Certainly this area should be
flagged for future study, analysis, and critique.

Finally, the total satisfaction area (Figure 3C) shows the Public
Services employees to be significantly ahead of the Technical Services
employees. The difference (68.69% to 52%) is large enough to justify a
detailed investigation into the causes and reasons for these figures.
Whatever secrets the Public Services management is harboring should be
exposed, hauled to the surface, and shared fully and completely with the
management of the Technical Services Division. The chief merit of satisf-
factions studies such as these is that it focuses the attention of all
levels of management upon common areas of concern. It is not the purpose
nor the intention of such research to make invidious comparisons. What-
ever differences which emerge can presumably be explained on the basis
of a thorough investigation into underlying conditions and job factors
well-known by present incumbents of key managerial positions because it
is their chief merit that they keep themselves informed fully of the
current state of affairs in all areas of their responsibility. In critical
areas of concern it may be wise to call in unbiased experts to look for
the answers. Investigations such as the present study are designed to
aid, not hinder present management in the search for answers to pressing
problems which do not yield readily to solution. Management should not
hesitate to call in such assistance when it is really needed. There are
powerful statistical methods and techniques which can be used to get at
such problems and puzzles. The investigators have hinted at some, and fully described some of these tools and analytical techniques in other papers dealing with the IUC problem areas.

The last section of this paper will deal with an aspect of Library A that is based upon a structural division of the library in terms of relative location (geographical). A large, new, modern library building was completed at University A (herein designated to preserve anonymity), the university located in the Southwest which was included as one of the libraries surveyed in the IUC consortium of libraries. The completion of this new library building occurred in 1971. Also existing on the campus of University A was the old library building. Sizable numbers of employees were left in the old library when the move was made to the new library. One of our pilot studies analyzed the differences and similarities existing between the Old Library and the New Library. The differences are illustrated in Figure 4A and Figure 4B. It should be remembered that the sole principle of classification used in the following analysis was based on this geographical location of the two library buildings.

For purposes of administration the Old Library and New Library are really one unified structure, viz., what we herein have previously alluded to (also in other articles) as "Library A."

In Figure 4A is shown a comparative analysis of the Old Library employees vis-à-vis the New Library employees. It turns out that a larger proportion of the employees in the Old Library are satisfied than are those in the New Library! This is a disconcerting discovery in light of the
fact that millions of dollars were spent on the design and construction of the New Library. Are we to conclude that all the money spent was wasted? No, there is a better explanation at hand. The move to the New Library building disrupted established patterns of relations. In addition, it was necessary to move literally tons of books from old shelves to new shelves. The move alone took two weeks to accomplish. It is only natural to assume that the New Library is undergoing a transitional phase. This study caught Library A (comprised of the Old Library and the New Library) in mid-stream of this transitional period. It will take Library A some time to settle down and adjust to the new regime of affairs. In the meantime the statistical figures may fluctuate somewhat erratically. It is the judgment of the investigators that the Old Library employees are more satisfied than the New Library employees simply because they have been more sheltered from the disturbing effects of the massive moving effort than have been the employees of the New Library. The latter category of employees were caught in the full blast of the move. In addition they have been required to set up a large variety of new systems and procedures which were only in the planning stages in the Old Library location. It will be necessary to monitor these relative satisfaction standings in order to detect the final, settled relationship. We predict that future satisfaction surveys will show a narrowing in the gap to levels of statistical insignificance. It may well be that the New Library, in time, will out-rank the Old Library in terms of contented employees.

In the Old Library (Figure 4A) it is work (itself), supervision, and people which turns the employees on. Promotion and pay turn them
off. However, on a comparative basis there are more (proportionately) satisfied employees overall (63.63%) in the Old Library.

In the New Library (Figure 4A) the employees are relatively more satisfied with people, work, and supervision. They are relatively more dissatisfied with pay and promotion. In addition these employees rank lower on total job satisfaction (46.29% to 63.63%). As we have indicated above, these figures will probably continue to fluctuate over time, at least until the transitional period is over. Future studies should focus upon this structural distinction in order to ascertain if any real forces are responsible for producing these differences in figures. If such differences are found to exist, after a reasonable time has elapsed, search procedures must be instituted to find out what is causing the differing composition of satisfactions in the two classifications.

Figure 4B can be interpreted in straightforward fashion. The reader can examine the figures for himself and come to his own conclusions about the possible causes underlying the differences in the data. The structural differences which exist can all be explained on the basis of variances in personal and situational variables present in Library A. Our studies have revealed many instances in which slight alterations in some of the key variables can produce quite sizable fluctuations in the correlations, and hence the density function patterns of, many of the key variables. If at all possible it is wise to glean over the normative tables defining the job satisfactions situation in a given organization in order to construct density functions which will reveal the dynamic quality of job
satisfactions patterns of behavior. The knowledge resulting from the picturing of such patterns of behavior can then be used by management to monitor and control the individual and situational variables in directions which are consonant with established goals and objectives.

Summary and Conclusion

There appear to be two major schools of thought on the value of job satisfactions research. We can call the first school the epiphenomenalism school of thinking. This school believes that job satisfactions are merely epiphenomenal in nature, the "squeak on the wheel" which is meaningless in terms of considering the turning of the wheel and the motion of translation in a progressive or forward direction. This school reasons that as long as the wheel turns it is useless to speculate about the causes and possible significance of the strange squeaks and noises emanating from the axle of the wheel itself.

The second school of thought places much more value on the research effort currently being poured into the job satisfactions area. To be consistent we could label this school the phenomenalism school of thinking. This group of thinkers believe that phenomena are the only sources of knowledge, the only realities. The phenomena (objects) referred to are job satisfactions. Knowledge of objects can be utilized, in the opinion of the phenomenalistic school, to predict the behavior of groups of employees.

The investigators subscribe to this school of thinking in regard to the value of job satisfactions knowledge. We believe that job satisfactions are quite a bit more meaningful than would be implied by characterizing them (as the epiphenomenalists do) as "merely squeaks on the wheel." In future articles the authors will continue to analyze the problems and questions which analysis of the research data poses for solution.
Management Policies and Practices

1. Work Policy
2. Pay Policy
3. Promotion Policy
4. Supervision Policy
5. People Policy
6. Other Policies and Practices

Figure 1. A Model of Organizational Effectiveness

Organizational Effectiveness

Employee Performance

Employee Behavior

Job Satisfactions

5. People Satisfaction
4. Supervision Satisfaction
3. Promotion Satisfaction
2. Pay Satisfaction
1. Work Satisfaction

Employee Performance and Employee Behavior

Management Policies and Practices
Figure 2. Simplified Organization Chart of Library A
FIGURE 3A. COMPARATIVE ANALYSIS OF JOB SATISFACTION IN SIX JDI (COMPONENT) CATEGORIES, USING TWO ORGANIZATIONAL DIVISIONS OF LIBRARY A AS THE PRINCIPLE OF STRATIFICATION

Note 1--The two organizational divisions of Library A are arranged in descending order, i.e., Public Services overall satisfaction is greater than Technical Services. This relative rank order was established by integrating the areas under the density functions defining job satisfaction levels for the two organizational classifications of the two organizational divisions of Library A.

### TECHNICAL SERVICES

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<th>Pay</th>
<th>Promotion</th>
<th>Supervision</th>
<th>Total</th>
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<td>69.54%</td>
<td>54%</td>
<td>56%</td>
<td>26%</td>
<td>46%</td>
<td>52%</td>
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<tr>
<td>66.78%</td>
<td>51%</td>
<td>39%</td>
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<td>41%</td>
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### PUBLIC SERVICES

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<th>Pay</th>
<th>Promotion</th>
<th>Supervision</th>
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<td>74.71%</td>
<td>68%</td>
<td>65%</td>
<td>26%</td>
<td>52%</td>
<td>57%</td>
</tr>
<tr>
<td>70.26%</td>
<td>59%</td>
<td>46%</td>
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(library)
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<thead>
<tr>
<th>Order of Importance</th>
<th>Order of Satisfactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pay</td>
<td>1. Coworkers (people)</td>
</tr>
<tr>
<td>2. Work</td>
<td>2. Supervision</td>
</tr>
<tr>
<td>3. Supervision</td>
<td>3. Coworkers (people)</td>
</tr>
<tr>
<td>4. Promotion</td>
<td>4. Work</td>
</tr>
<tr>
<td>5. Promotion</td>
<td>5. Supervision</td>
</tr>
</tbody>
</table>

*Based on nationwide sample (N=3,600)
**Based on Library A sample (N=67)
***Based on Technical Services sample (N=25) in Library A.
FIGURE 3C. COMPARATIVE ANALYSIS OF JOB SATISFACTION IN TWO DIVISIONS OF LIBRARY A.

PAY

<table>
<thead>
<tr>
<th>Category</th>
<th>Public Services</th>
<th>Technical Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay 54%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SUPERVISION

<table>
<thead>
<tr>
<th>Category</th>
<th>Public Services</th>
<th>Technical Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervision 56%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WORK

<table>
<thead>
<tr>
<th>Category</th>
<th>Public Services</th>
<th>Technical Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work 91%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PEOPLE

<table>
<thead>
<tr>
<th>Category</th>
<th>Public Services</th>
<th>Technical Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>People 88%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1--The JDI (Component) categories of Library A are arranged in descending order, i.e., people satisfaction is greatest, while promotion satisfaction is least. These relative rank orders were established by integrating the areas under the density functions defining job satisfaction levels for all five JDI (Component) categories.
FIGURE 3C. (CONTINUED) COMPARATIVE ANALYSIS OF JOB SATISFACTION IN TWO DIVISIONS OF LIBRARY A.

<table>
<thead>
<tr>
<th>Percent Satisfied</th>
<th>Public Services</th>
<th>Technical Services</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>100%</td>
<td>68.69%</td>
<td>52%</td>
</tr>
<tr>
<td>20%</td>
<td>100%</td>
<td>68.69%</td>
<td>52%</td>
</tr>
<tr>
<td>30%</td>
<td>100%</td>
<td>68.69%</td>
<td>52%</td>
</tr>
<tr>
<td>40%</td>
<td>100%</td>
<td>68.69%</td>
<td>52%</td>
</tr>
<tr>
<td>50%</td>
<td>100%</td>
<td>68.69%</td>
<td>52%</td>
</tr>
<tr>
<td>60%</td>
<td>100%</td>
<td>68.69%</td>
<td>52%</td>
</tr>
<tr>
<td>70%</td>
<td>100%</td>
<td>68.69%</td>
<td>52%</td>
</tr>
<tr>
<td>80%</td>
<td>100%</td>
<td>68.69%</td>
<td>52%</td>
</tr>
<tr>
<td>90%</td>
<td>100%</td>
<td>68.69%</td>
<td>52%</td>
</tr>
</tbody>
</table>

FIGURE 3C. (CONTINUED) COMPARATIVE ANALYSIS OF JOB SATISFACTION IN TWO DIVISIONS OF LIBRARY A.
FIGURE 4A. COMPARATIVE ANALYSIS OF JOB SATISFACTION IN THE SIX (COMPONENT) CATEGORIES, USING THE INDICATED STRUCTURAL DIVISION OF LIBRARY A AS THE PRINCIPLE OF STRATIFICATION.

Note 1--The structural categories of Library A are arranged in descending order, i.e., overall job satisfaction is greater in the Old Library than in the New Library. This relative rank order was established by integrating the areas under the density functions defining job satisfaction levels for the two structural classifications of Library A.

<table>
<thead>
<tr>
<th>Component</th>
<th>Old Library</th>
<th>New Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>33.5%</td>
<td>56.66%</td>
</tr>
<tr>
<td>Promotion</td>
<td>35.7%</td>
<td>46.29%</td>
</tr>
<tr>
<td>Supervision</td>
<td>36.36%</td>
<td>57.19%</td>
</tr>
<tr>
<td>People</td>
<td>47.51%</td>
<td>63.40%</td>
</tr>
<tr>
<td>Work</td>
<td>63.40%</td>
<td>63.63%</td>
</tr>
<tr>
<td>Total</td>
<td>46.29%</td>
<td>63.63%</td>
</tr>
</tbody>
</table>

Percent satisfied under the density functions defining job satisfaction levels for the two structural classifications of Library A.
FIGURE 4B. COMPARATIVE ANALYSIS OF JOB SATISFACTION IN TWO STRUCTURAL CATEGORIES OF LIBRARY A.

Note 1--The JDI (Component) categories are arranged in descending order of overall job satisfaction, i.e., work satisfaction.

The areas under the density functions defining job satisfaction levels for the two structural classifications are integrated to obtain the relative rank orders shown. These relative rank orders were obtained by integrating the areas under the density functions defining job satisfaction levels for the two structural classifications of Library A.

Using the JDI (Component) classifications as the principle of stratification.

<table>
<thead>
<tr>
<th>Category</th>
<th>OLD LIBRARY</th>
<th>NEW LIBRARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion</td>
<td>63.63%</td>
<td>69.08%</td>
</tr>
<tr>
<td>Supervision</td>
<td>72.12%</td>
<td>63.75%</td>
</tr>
<tr>
<td>People</td>
<td>64.90%</td>
<td>67.70%</td>
</tr>
<tr>
<td>Work</td>
<td>77.45%</td>
<td>70.27%</td>
</tr>
</tbody>
</table>

Percent Satisfied

<table>
<thead>
<tr>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FIGURE 4B. (CONTINUED) COMPARATIVE ANALYSIS OF JOB SATISFACTION IN TWO STRUCTURAL CATEGORIES OF LIBRARY A, USING THE JDI (COMPONENT) CLASSIFICATIONS AS THE PRINCIPLE OF STRATIFICATION

<table>
<thead>
<tr>
<th></th>
<th>Old Library</th>
<th>New Library</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>PAY</td>
<td>PAY</td>
</tr>
<tr>
<td></td>
<td>46.29%</td>
<td>53.57%</td>
</tr>
<tr>
<td></td>
<td>63.63%</td>
<td>36.36%</td>
</tr>
</tbody>
</table>

*PAY 53.59% 36.36%