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MOTIVATION: CLOSING THE GAP BETWEEN
THEORY AND PRACTICE

AUGUST, 1979

Edward E. Lawler, III

The University of Michigan,
University of Southern California, and
Battelle Human Affairs Research Centers

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MOTIVATION: CLOSING THE GAP BETWEEN THEORY AND PRACTICE

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Battelle Institute

Need theory, expectancy theory, reinforcement theory, intrinsic motivation theory, and last but by no means least, two-factor theory—the literature on motivation in organizations is full of different names, concepts and theories. At first glance these theories seem to be saying very different things. They use different terms, different concepts and have stressed different kinds of programs and practices that organizations should use to improve motivation. Some have talked about the importance of extrinsic rewards, others have stressed job enrichment, and still others have talked about the importance of participation. Some research studies purport to show that two-factor theory is correct, while others purport to show that expectancy theory is correct. Given this diversity, is it any wonder that practitioners talk about being confused by apparently conflicting recommendations? Is it any wonder that the proponents of different theories seemed to be more obsessed with distinguishing their theory from the others than

1Partial support for this paper was provided by the Office for Naval Research Contract N00014-77-C-0127.
with showing how an organization can develop a motivating and satisfying total work system? I think not.

Indeed, I think that the significant gap between what is known about motivation and the practices that most organizations engage in has been caused in part by the way in which motivation theory is described, presented, and tested. The gap between what is known about motivation and the practices in most organizations will, of course, never be completely closed. The dissemination of knowledge always moves slowly, and practice inevitably must lag theory and research. However, in the area of motivation theory, if two fundamental changes were made in the way motivation theory is described, implemented, and researched, the gap could be much smaller than it presently is. What is needed is (1) a more explicit recognition of the large areas of agreement among the different approaches to work motivation, and (2) strategies for improving motivation that are more comprehensive and inclusive of the complexities of organizational life. If these two changes were accomplished, I feel that our motivation theories would be better and our organizations would be more effective. A look at these two points in more detail will help to show what needs to be done and what can be gained.

Motivation Theory: Areas of Agreement

In looking at different motivation theories, it is very easy to lose sight of the commonalities because of the many
differences which are constantly raised and emphasized. It is hardly surprising that theorists stress how their theory differs from all the others and how it can correctly predict behavior in some situations, no matter how unlikely to actually occur, that some other theory cannot. In the world of research the rewards go to individuals who develop new theories, not those who look for common threads among existing theories. Despite their efforts to be different, there is a fundamental set of common points that are characteristic of almost all motivation theories, a necessity which is brought on by the necessity of dealing with a large mass of convergent research findings. Let me briefly review some common points to give the reader a sense of what to me seems to be generally accepted wisdom in the area of motivation.

1. Motivation is determined by a combination of forces in the individual and forces in the environment. Neither the individual nor the environment alone determines motivation. Individuals come into organizations with certain psychological characteristics. Their past experiences and history influences how they look at the world and how they respond to what the organization does. On the other hand, the work environment provides structures and situations which influence behavior of people. Different environments tend to produce different behavior in similar people just as dissimilar people tend to behave differently in similar environments.
2. People make decisions about their behavior. While there are many constraints on the behavior of individuals in organizations, most of the behaviors observed are the result of individuals making decisions to do one thing rather than another. Individuals make decisions about coming to work and staying at work, and they make decisions about the amount of effort they will direct toward performing their jobs.

3. People have goals and rewards that they try to achieve and punishments that they try to avoid. Individuals seek certain things in the environment. Although there are differences among individuals in what they seek, there is a consistent pattern of people trying to achieve those goals or rewards in the environment which are important to them. The implication of this is that if motivation is to be understood, it is critical that an accurate picture of the goals and needs of individuals be developed. In other words, it is critical to know what is important to people.

4. Behavior is determined by the connection between the outcomes that people value and their behavior. In simple terms, people tend to do those things which lead to rewards or goals that they desire; and they avoid doing those things that they see as leading to outcomes they do not desire. Thus, motivation to engage in a particular behavior is likely to be high when there is a clear connection between engaging in the behavior and the reception of valued rewards or the attainment of a valued goal.
5. The rewards that people receive can be both internal and external to the person. Much of the original thinking on motivation stressed the importance of such external rewards as pay, promotion, and status symbols. More recently it has become clearly established that feelings such as a sense of accomplishment and doing meaningful work and achieving something meaningful can be important rewards themselves.

6. People sometimes misperceive the situation. There is nothing to guarantee that people will accurately perceive the connection between performance and the rewards they value. Because of their past history and individual differences, in fact, different people often see the same situations in different terms. Thus, an effective motivation strategy must make very clear the connection between behavior and rewards.

Overall, the points made so far suggest that an individual will be motivated to perform effectively in an organizational setting when effective performance leads to rewards that the individual values. The challenge, then, is to create a work environment in which this condition will exist. At one level, it doesn't sound like a difficult task, but years of experience with programs which are designed to accomplish just this suggests that it is. Let us therefore turn to a consideration of the problems involved in implementing motivation theory.
Motivation Theory and the Design of Organizations

There are a multitude of reasons why it is difficult to tie rewards to performance in complex organizations. Most motivation theories, however, have little to say on the point and as a result are of little value to the person who wants to "change something" in order to increase motivation. The practitioner who wants to use theory as a guide to practice is faced with long, esoteric and sometimes irrelevant debates about how one theory differs from another. The situation is further worsened by the fact that different theorists seem to have developed their own pet micro theories about what aspect of the organizational environment should be focused upon in order to increase motivation. Some, for example, have stressed job design; others, pay systems; others, leadership; and still others, the work group.

The focus on such things as job enrichment and merit pay plans has served a useful purpose in emphasizing that all of these can and do have a significant impact on motivation. However, it has served a negative effect in the sense that it has suggested to many that any one of these can and should be dealt with in isolation. It has contributed to what might be called the single system approach to thinking about motivation in work organizations. Single system approaches, regardless of whether their focus is on design, pay, groups or leadership, are in some cases quite misleading while in
others, they are just plain destructive and suicidal when it comes to changing organizations. For one thing, people differ in what is important to them, and as a result, a system which emphasizes just job design may ignore rewards and goals that are important to a large percentage of the people. In addition, organizations are complex interdependent systems that are made up of a multitude of complex subsystems. A change in any subsystem is likely to have profound implications for and affects on other subsystems. For example, a job enrichment program can lead to demands for increased pay which, if not met, can worsen rather than improve a situation.

The clear implication of the systems nature of organizations is that if motivation is going to be dealt with effectively in an organization, it is important that a total systems point of view be adopted. That is, consideration of motivation must take into account all the important goals and rewards that are available in the organization and all of them must be assessed and properly dealt with in terms of their relationship to each other and to performance. This means focusing on not just the pay system, the promotion system or the job design system, but focusing on all of these to see that they are integrated in a coherent, systematic and mutually reinforcing manner. Admittedly, this is a large challenge, but failure to deal with the total system virtually assures problems.
Unfortunately, there are few motivation theories to guide the practitioner in how all the aspects of an organization can be coordinated so that motivation will be maximized. Motivation theorists have tended to stress the effectiveness of such things as job enrichment, bonus pay plans, and different leadership styles. What they haven't stressed is how all of these can be brought together, and integrated so that a meaningful overall motivational system can be put in place in an organization. The result is that a lot is known about how to enrich jobs, but very little is known about how to coordinate the enrichment of jobs with the creation of a motivating pay system and the training of supervisors to help their subordinates effectively set goals and reinforce subordinates for effective behavior.

Research and the Design of Organizations

Much of the research on motivation in work organizations suffers from the same problem as does the theory—it is single system bounded. Unfortunately, most studies which have been done in organizational settings have focused rather narrowly on one topic. For example, if their focus has been on job enrichment, they typically have not focused on how job design changes affect such things as leadership and pay systems. Those studies which do focus on multiple systems and variables typically suffer from another flaw as far as their practical usefulness is concerned. They tend to be basic
research studies that are correlational in nature rather than evaluations of organizational changes which are driven by the theory. We have, for example, hundreds of studies which have tried to test the validity of two-factor theory and expectancy theory, but very few studies which have looked at such things as how different approaches to job design fit with such pay incentive plans as the Scanlon plan. Basic correlational studies may accomplish the goal of testing one theory or another although even here they often fail, but they are of little help to the practitioner who must change an organization.

What is needed are studies which consider multiple systems as broad based, and which fall somewhere between basic research and highly applied engineering studies. Mason Haire once called them development research studies. There is a tradition of this kind of research in other fields. It is seen as an important intermediate step between the basic research which discovers the phenomena and a production phase in which the research idea is utilized in a product or treatment. In this scheme, developmental research plays a key role in polishing up the idea finding how, when, and where it can be applied and in determining its ramifications when it is applied in different ways. This kind of broad based assessment or developmental research is precisely what is missing in the area of motivation theory. As a result, little is known about how best to implement such things as
job enrichment and even less is known about the side effects it produces. Overall, then, in order for research to have a practical pay off, it needs to become more action oriented and more total systems oriented, in short, more developmental in nature.

The Mini Enterprise

Despite the failure of theory and research to point the way to an integrated total systems approach to motivation, there are some clues available as to what combination of conditions is likely to lead to high levels of motivation. In most organizations the most motivated employees are those at the very top of the organization. A good guess as to why this is so can be found in the unusual degree to which their rewards are tied directly to their performance. They often are on bonus plans which tie their pay to organizational performance; their status and esteem gets tied into the results of the organization; and their jobs are ones in which they have a great deal of control, receive feedback about how well they and the organization is performing, and they do relatively meaningful tasks.

In essence, at the top of an organization, many of the conditions which people who stress the advantages of such things as job enrichment and Scanlon plans exist. The resulting high levels of motivation should not, therefore, be surprising. The challenge is to create similar conditions at different levels in the organization.
It is not easy to translate the conditions at the top of an organization to other parts because there is one advantage at the top of an organization that often is not present at lower levels: because of the way most organizations are structured, people at the top have a sense of the enterprise that is not shared by the rest of the organization. They have a unique sense of the whole endeavor and how it is doing because they receive feedback about how effectively it is functioning. Once one moves down into an organization, the sense of the enterprise often rapidly deteriorates, but does it have to? Maybe not--there is reason to believe that by putting together what is known about job enrichment, pay systems, leadership, and the design of information and control systems, it is possible to create, lower down in the organization, many of the same conditions which lead to people at the top having a sense of the enterprise. What is needed is the willingness and ability within larger organizations to develop mini enterprises within themselves. How this can be done, of course, needs to be adapted to the conditions that face particular organizations. There are, however, some interesting models developing in large organizations--models that suggest the possibility that many of the motivational advantages of small enterprises can be realized by large ones if an effort is made to create businesses within the larger organizations.

For example, some large organizations are now creating highly autonomous plants. In order to provide these plants
with a sense of them being an independent enterprise, they are treating them as profit centers and tying the pay of people in those plants to the overall performance of that plant. When these plants are relatively small, e.g., less than 500, this can create a positive feeling in the plant about the relationship between pay and performance. In addition, this has been combined with a heavy emphasis in the plants upon enriched jobs, either individually or on a group basis, so that within the plant, people have a strong sense of doing an overall meaningful job, and they receive a considerable amount of feedback about both how well they are performing in their area and how well the plant as a whole is performing. The effect is to create a strong sense of how the overall enterprise is doing, and what their contribution to the enterprise is. In essence, the assumption is that business is an exciting, engaging, challenging activity, and that conditions need to be created such that as many people as possible in the organization can have a real sense of participation in the enterprise. When this is done, responsibility for the enterprise is spread, and as a result, motivation is spread.

Another example of how the sense of the enterprise can be communicated to a large number of people in the organization is the work that is being done on autonomous work groups. These groups are often given charge of a particular area of production or operation in an organization, and they are charged
with total management of this area. This means that to make
production, staffing, and pay decisions within a large plant
a number of these groups are developed so that people in the
plant do not feel that they are part of a large impersonal
operation. When these groups are established, they can be
given not only responsibility for production, but their pay
can be tied into performance of their activities and they
can be given extensive feedback about how well their particular
part of the plant is functioning. To a significant degree,
the same sense of enterprise which is present among the top
people in the organization can be present for them.

An additional source of clues about how to fit subsystems
together in order to create a motivating total system can be
found in how some very interesting new plants have been
designed and managed. At the present time there exist in the
United States at least 50 new plants which have been designed
from the ground up to create a highly involving and motivating
work setting. The designers of these new plants have had to
design total plants and as a result, they have not had the
luxury of single focus on job design, pay or any other feature;
they have had to deal with them all, and they have had to come
up with systems in which the parts "fit" together. Perhaps
because they had had to come up with "practical" total systems,
the designers of the new systems seem to have relied on the
common core of what is known about motivation and to have
selectively drawn from the "practical recommendations" of
motivation theorists in designing their systems. What seems to have emerged is some very effective "melting pot" approaches to motivation that represent a creative synthesis and at times extension of what is known.

A detailed consideration of the approaches which have been taken in the new plants goes beyond the scope of the present paper since it would require a discussion of issues ranging from job design to pay.* A brief description of some of the design features, however, may help to clarify how these plants are designed. The plants are organized around teams which make most operating decisions. Individuals are expected to learn all or most of the production jobs in the plant, and given pay increases when they learn new jobs. All distinction between exempt and non-exempt employees are eliminated, everyone is on salary, has the same benefits, and uses the same physical facilities. Plant operating results and prospects are shared with all employees, and in some plants, bonuses are paid to everyone based upon these.

Perhaps the most striking point about these plants is the degree to which the subsystems seem to fit together to produce a coherent whole. The pay systems seem to reinforce the approach to job design which fits the selection system and so on. All are designed to encourage intrinsic motivation, the development of skills and abilities, and an

involvement in the overall enterprise. Any one of these design features is unlikely to work in a traditional system; it is only in the context of these other features that they work. This need for fit and the synergistic effects of fit has been sadly lacking in the literature on motivation. Rather than focusing on an individual's motivation to do his or her job well, it focuses on what influences motivated individuals are to contribute to the performance of their organization. This distinction is important because the latter can produce the former (job motivation) but the former does not necessarily lead to the latter. Thus, in situations where having individuals perform their individual jobs as well as possible is not optional as far as organizational performance is concerned, we would expect different behaviors on the part of individuals who are motivated to perform their jobs and those who are motivated to see the organization perform effectively.

Figure 1 shows that certain design features produce psychological states which in turn influence motivation. The following design features are included:

1. **Participative gain sharing plan:** plans like the Scanlon and Rucker plans which tie pay to the operating results of plants or organizations;

2. **Public information on operating results:** sharing with all employees the financial and productivity results for the organization;
3. Economic education: training employees to understand the operating results which are shared;

4. Egalitarian perquisites: treating all employees similarly in such areas as fringe benefits, time clocks, parking, rest areas, etc.;

5. Participative structures: plant elected or representative committee that makes a wide variety of "management type" decisions.

6. Self managing teams: small groups in which individuals know a variety of jobs and which manage in a participative way parts or all of an organization;

7. Goal setting: the practice of employees having specific goals which relate to their performance and/or that of the organization;

8. Input and output identity: organizations having a clearly identifiable and measurable set of inputs and outputs;

9. Interface with competitive environment: employees throughout the organization deal with or are aware of what the organization has to do to compete effectively in the environment in which it operates.

As the figure shows, all or most of these design features need to be present for the necessary psychological states to exist since individually and in combination, they produce the psychological states. The four psychological states in turn are necessary preconditions for motivation to be present.
FIGURE 1.
Model of the Determinants of Organizational Motivation
For extrinsic motivation to be present, individuals must understand the pay performance contingencies which are present and they must receive information about the performance of the organization. For intrinsic motivation to be present, in addition to knowledge of organizational performance to exist, two other conditions must exist. The individual must feel that he or she has influence on and responsibility for the performance of the organization. In addition, the performance of the organization must be meaningful in the sense that the performance of the organization is something that the individual identifies with and values.

The reader who is familiar with expectancy theory, the Scanlon plan, and the research on job design, will recognize that the model draws upon previous work in these areas. It goes beyond them, however, in the sense that it integrates the work in these areas and it attempts to specify what organization design features are required in order for an individual to be motivated to contribute to the performance of the organization.

At this point a great deal more needs to be learned and a great deal of developmental work needs to go on before it will be clear how to create an integrated sense of the enterprise for people in many work situations. Nevertheless, the model presented above and the concept of creating a sense of the enterprise for all employees seems to be a promising lead to how motivation theory can be combined with the
problems of administering an organization. They offer a conceptual way to bring together the emphases of different writers, and it provides a hope for integrating the work on job design, pay systems, information and control systems, and leadership behavior. It strongly suggests that they must all be looked at as part of a motivational package which has as its goal providing a meaningful motivational environment for individuals at all levels in the organization. This seems to be the best approach available for assuring that in fact the agreement for implementing practices fit with the high levels of fundamental agreement that exists about what motivates people.

Summary and Conclusions

The problem of providing a motivating work environment for individuals is clearly a difficult one to solve, but it may not be as difficult as it appears to be at first glance. First, it is apparent that once the different motivation theories are examined there is a high level of agreement on some fundamental points. Admittedly, they have each stressed their own particular uniqueness and have, therefore, talked about different kinds of changes that are appropriate in organizations. Many of the changes they have suggested are not competitive with other changes; rather, they are compatible because the theories generally have a common set of points that they agree on.
In addition, there are some interesting clues around about how various components of a motivating work environment can be put together so that motivating conditions can be created at all levels in an organization. Specifically, a look at the jobs of the top people in an organization shows that they already have many of the conditions present that the work on motivation suggests create a motivating work environment. Their jobs contain the kind of job characteristics that people interested in job design might suggest are desirable. In many cases the pay system at the top is one that is motivating and the kind of feedback and supervision they get is congruent with what is called for according to the leadership theory that is concerned with motivation. The challenge, therefore, is to create similar conditions at lower levels in the organization. An additional clue comes from the experimentation which has been taking place in new plants. This seems to point to the importance of having an internally consistent approach to such things as pay, decision making, and job design. For purpose of illustration, a model of one set of internal consistent practices was presented.

Admittedly, there is a paucity of models on how to create highly motivating conditions throughout organizations, but more and more organizations seem to be making some exciting inroads into figuring this out. In some ways the activity in some of the leading organizations seems to be outstripping the available theory and research. The challenge to those
interested in motivation theory is to do the kind of research and theory that will lead to practice that is sensitive to the realities of individual differences and that at the same time can help to close the gap between theory and practice. What kind of theory and research is likely to do this? In my opinion, what is required is research which is developmental in nature and theory which is multiple-systems oriented and which deals with issues like internal consistency.
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