THE MEASUREMENT OF QUALITY OF WORKING LIFE

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Die bruikbaarheid van vraelyste om inligting te voorsien op grond waarvan die gehalte van 'n werklewe nagevors kan word, word bevraagteken. Daar is weinig ooreenstemming oor wat sodanige vraelyste meet. Die probleem word onderstreep deur die feit dat navorsing waarin sodanige meetinstrumente gebruik word deurgaans 'n hoë mate van werkstevredenheid toon terwyl werknemerfrustrasie en vervreemding aan die orde van die dag is. 'n Nuwe benadering tot die bepaling van werkstevredenheid word bepleit waarin die werknemer deelneem aan die ontwikkeling van die meetinstrumente wat gebruik word.

In a previous article (Orpen, 1981) an attempt was made to clarify precisely what industrial psychologists mean by the term "quality of working life". This is an important preliminary task if we are to fully appreciate what it is that industrial psychologists are trying to do. For only if we understand what is meant by this complex and elusive term, will we be in a position to appreciate what is involved in trying to improve the quality of working life by applying the methods of procedures of psychological science to problems of people at work - the essence of industrial psychology.

Provided one is fairly clear how psychologists operationalize this broad term, the next step is to devise a means of measuring it. The present article intends to show, first how industrial psychologists have usually measured quality of working life, and, second, to develop a critique of this orthodox position. Finally, an attempt will be made to briefly sketch an approach to the problem of measuring the quality of working life that appears to possess important advantages over the traditional method.

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Probably because of their psychological training, industrial psychologists have typically approached the question of working life by examining the *attitudes* of *individual* employees. This concern with the job attitudes of individuals was also prompted by the concerns of both employees and employers. As far as employees are concerned, they understandably want jobs in organisations that produce positive attitudes. This desire is also reflected in the growing public interest in fostering favourable job attitudes. For instance, until about a decade ago, public policy in countries as diverse as the United States and South Africa was concerned primarily with finding enough jobs for people desiring employment. Since then, however, increased attention has been given to employees feelings about the work they perform. It is not uncommon now for government spokesmen to draw attention to the desirability of not only raising employment and productivity, but of also trying to ensure that people hold more favourable attitudes to their jobs as well.

Employers worry about employee attitudes for essentially two reasons. Undoubtedly the most significant reason stems from the belief that job attitudes influence employee behaviours such as attendance and length of service. It is commonly and understandably assumed that positive attitudes lead to positive behaviours. To a lesser extent, organizations have also sought favourable employee attitudes in their own right. In this context, managements view employees as a group to please much as they attempt to please other groups such as customers or clients and investors. Favourable job attitudes provide evidence that management is doing all right by its employees. For these reasons alone, it is understandable that industrial psychologists should have spent so much time and energy trying to devise ways and means of measuring job satisfaction.

The most common way which industrial psychologists try to measure job satisfaction is by means of pencil-and-paper questionnaires completed by employees. Typically, such questionnaires yield a score based on the individual's responses to a series of questions dealing with different facets of his job. Employees are usually asked to indicate whether they are satisfied or dissatisfied with the various aspects of the job described by the questions. For instance, in the widely-used"Job Description Index (JDI) developed by Smith, Kendall and Hulin (1969) they indicate their satisfaction with each item by simply responding "yes" (the item described the facet), "no" (the item does not describe the facet) or "?" (the employee cannot decide). The more "yes" responses to positive items such as "good chance for promotion", "adequate pay" and "friendly co-workers", and the more "no" responses to negative items such as "dead-end job", "poor pay" and "limited opportunities" the greater the

satisfaction. In order to obtain an overall measure of how satisfied an employee is with his job, his responses to the various questions are summed, to produce a single or total score.

In the equally-popular Minnesota Satisfaction Questionnaire (MSQ) of Weiss, Dawis, England and Lofquist (1967) employees indicate their feelings toward a series of items on five-point scales, ranging from "very dissatisfied" (1) to "very satisfied" (5). Each item describes an aspect of the individuals job, such as "being able to keep busy all the time", "the chance to do different things from time to time", "the way company policies are put into practice" and "the praise I get for doing a good job". There are 100 items in the scale grouped into five categories each of which gives a measure of the extent to which employees are satisfied or dissatisfied with the 20 facets of their jobs, including advancement, variety, working conditions, security and recognition. As in the case of the JDI, to obtain a measure of the employee's overall or general feelings about his job, his responses to all the items are summed.

It is the central argument of the present paper that these kinds of questionnaires are totally inadequate as a means of assessing something like quality of working life. The starting point for this argument is the serious weaknesses such questionnaires possess as accurate indicators of what they are supposed to measure. For instance, one of the most serious criticisms of this way of assessing job satisfaction derives from the fact that people can adjust jobs and work to suit themselves instead of adjusting themselves to the job. Recent examples of such adjustment range from the harmless or even helpful acts of using room deodorizers and incense, or working ahead to build a buffer stock (to be able to control work pace), to more "negative" acts such as "soldiering" on the job, and sabotage of product or plant, which also represent workers' attempts to modify the job or workplace in order to satisfy some feeling of distress. As illustrated above in the example of the car driver in the auto plant, a frustrated worker might say that the job is satisfactory or satisfying if he or she can exert some control over the work or workplace, even if that control results in "negative" behaviour.

There is a special case of this mechanism of "personal adjustment" that raises serious difficulties for the questionnaire method of measuring job satisfaction. It is a mechanism that is probably responsible for the fact that job satisfaction usually increases for people who stay on jobs over a period of time, and is higher for people with longer time in job or grade. For example, job satisfaction where people have held jobs for five to ten years is usually lower than satisfaction with similar jobs in the same organization for people who have held those jobs 15 to 20 years, or longer. This result is frequently explained on the basis that "we become

what we do". The longer we spend on a job the more we may come to define ourselves in terms of that job, while at the same time the less likely it is for us to change that job so that we come to identify more with the job and confuse assessments of the job with assessments of ourselves. Therefore, if we are asked to report the level of satisfaction for a job, and we have been at that job for a long time, with little change that we will move from that job, then we are more likely to say that job is satisfactory. To say that it is unsatisfactory, or that it is a bad job at that point has more of a direct impact on what we are and what we see ourselves to be.

Another serious set of limitations of the questionnaire method (of assessing job satisfaction) derive from the incomplete and vague *definitions* of job satisfaction that formed the starting point for the development of any questionnaire that attempts to assess this variable. For instance, as Schwab and Cummings (1970) make clear, satisfaction can be, and often is, regarded as the fulfilment of wants expressed as an attitude towards the job as a socially-defined object or concept. Unfortunately, this standard way of looking at job satisfaction is ambiguous because it relies on the fact that we can like or dislike only what is known. We cannot want something (therefore allowing the opportunity for dissatisfaction or frustration) until we know about it or until we know it is available. Expectations of what is "out there" differ with education, exposure to alternatives, and with much more. It two workers have the same knowledge about some aspect of outcome of a job activity, they can still differ one from another in their assessment of the potential availability and of the importance of these expectations to each of them. In addition, the awesome task of guaranteeing that all aspects of the workplace, which are potentially important to job occupants, are included in pre-coded measurement makes this want-satisfaction approach even more general and ambiguous than was implied above. In this light, using concepts like attitudes and wants seems to lead investigators not to measures of what work and jobs are like, but more toward the vagaries of what is known, or is seen to be available in terms of the norms or standards that the respondents to job satisfaction studies bring with them. These issues are methodological, but result from the improper or at least incomplete definition of satisfaction.

The fundamental difficulty here is that, although job satisfaction and performance are regarded as the main variables which industrial psychology seeks to maximize, there is no agreement as to what "satisfaction with ones job" really signifies or indicates. For instance at the present time there are at least three different ways of thinking about satisfaction, but little consensus that anyone way is better than the others. Perhaps the best known of those is the

discrepancy view of Porter (1961) and Locke (1969). In terms of this view, satisfaction is the difference between what a person wants from the work situation and what he perceives he is currently getting from it. The trouble for psychologists with this view is that it is difficult to study satisfaction meaningfully if one includes in ones definition the notion of "how much do you want". Since this notion concerns the personal values of people, it has the effect of making part of the satisfaction measure independent of the situation being studied. In addition, it is difficult to give any clear sense to any idea of satisfaction which, like this one, does not explicitly take account of what people feel they are entitled to receive, as distinct from what they want.

A number of critics of the discrepancy perspective (e.g. Lawler, 1971; Ronan, 1970) have argued that it is essential for any adequate conceptualization of satisfaction that the twin notions of how much people feel they should receive and, separate from it, how much they actually want. According to Lawler (1971) and Ronan (1970) satisfaction is then given by the differences between measures of these separate notions and what a person currently receives from the work situation. The basic problem here is that it is not clear exactly how those three measures are to be combined in particular cases to produce a single index of satisfaction.

A second approach to the problem of satisfaction is the one adopted by psychologists like Kuhlen (1963) and Ross and Zander (1977). This is to treat satisfaction as the difference between a person's fulfilment in some particular respect and the importance to the person of that particular kind of fulfilment. Unfortunately for its proponents, this perspective also suffers from grave difficulties. These can be made readily apparent if one considers how one would go about measuring satisfaction with something like pay with this approach.

First of all, how is the person classified who says he has a great deal of pay, but is very unimportant to him. There is a large discrepancy. Should we assume, then, that he is dis-satisfied with his pay? On the other hand, is the person to whom pay is of moderate importance and who receives very little always going to be less satisfied than the person to whom pay is very important but who receives a moderate amount? The answer obviously is no; it depends on the person's perception of what his pay should be, and this probably is determined by the job the person holds and a number of other things. In most discrepancy theories it is possible for a person to say he is receiving more pay than he should receive or more than he wants. This point has not been stressed by most discrepancy theorists, and in one sense it presents some problems for them. They have not been clear on how to equate

dissatisfaction due to overpayment with dissatisfaction due to underpayment. Are they produced in the same way? Do they have the same results?

Do they both contribute to overall job dissatisfaction? These are some of the important questions that discrepancy theory has yet to answer; but until they do, it is difficult to see how the approach can be accepted as an adequate way of defining satisfaction.

A third way of looking at satisfaction is that represented by equity theory, as presented by Patchen (1961), Homans (1966) and Adams (1965). According to this perspective, satisfaction is determined by an individual's input-output balance; that is, by the ratio of what one receives from the job to what one puts into it. If these two perceptions are in balance, a state of equity is said to exist. For our present purposes, the important point is that satisfaction is supposed to result when equity exists and dissatisfaction when inequity exists. Despite its intuitive appeal, there are a number of difficulties with this perspective. For one thing, it fails to recognize that some people actually enjoy being in a state of inequity, they find the slight degree of tension produced to be positively satisfying. For another, the theory does not provide us with a way of measuring equity independently, but this is necessary if the theory is to be testable. The theory is also vague on what it is that determines an individuals perceived inputs, especially what effect the role of the inputs and outputs of others (with whom they compare themselves) have on such perceptions. Finally, it is difficult to go along with the theory's view that the satisfaction of having high inputs match high outputs is quantitatively the same as that of having low inputs match low outputs. Surely it seems sensible that more satisfaction will be produced by the first situation than the latter one, which is perhaps better described as one of complaining rather than genuine satisfaction. Again, it seems difficult to accept the equity view that something like overpayment will lead to just as much dissatisfaction as underpayment; i.e. that it is *just* the ratio of inputs and outputs that count. Surely the input greater than output situation will have different consequences for satisfaction than the output greater than input situation even if the input-output difference is the same in both cases. In summary, all three perspectives suffer from serious shortcomings as adequate ways of defining satisfaction with ones job.

Yet another problem is that satisfaction can be seen not just as a positive attitude towards ones job, but equally legitimately, as a function of one's ability to adjust to a given work situation, or to modify that situation to one's needs. In other words workers may report satisfaction with a job to which they have adjusted their needs or requirements, irrespective of the real quality of that job or of their working life. If these employees see no avenues of

escape and if they have made a suitable adjustment, then they could well see their work (whatever it is) as satisfactory. When this kind of adjustment satisfaction is measured, it may or may not be measuring a stable characteristic. A most destructive as well as unstable personal adjustment mechanism is on-the-job drinking or other narcotic use. To the degree that his characteristic is an unstable one, satisfaction is a less reliable measure of quality of working life. Moreover, even if it is a stable characteristic, satisfaction may, in terms of this argument, mean something very different from the interpretation (as indicating an attitude of liking) that is typically placed on it by industrial psychologists. This fundamental difficulty is neatly expressed by Argyris (1970) who draws attention to the *different* things employees may mean when they say, they are satisfied, in the following way. "We could argue that the workers, in saying they are satisfied, are saying either (a) I must enjoy my job in order to live with myself (thereby reducing the potentiality for dissonance), (b) I must enjoy it or else I have to go through the extremely difficult task of finding another job (thereby again reducing the probability of his own unhappiness and discomfort), or finally, (c) one way to live with the job is to enjoy it" (p. 70).

The consequences of this fundamental point for our discussion are twofold. First, there is no way the industrial psychologist can know for sure from the questionnaire itself which of those different interpretations is the correct or valid one to put on the "satisfied" responses of the employees. Second, none of those apparently "satisfied" responses can be really said to derive from a genuine feeling of really liking ones job. In each case, but particularly that of the first two, these responses are best seen as a kind of adaptive process on the part of employees that results, not from a deep-lying positive attitude towards their work, but instead from the fact that (a) work is an important part of their lives and (b) they do not really like it, but are afraid of admitting this even to themselves. This kind of explanation is usually missed by industrial psychologists who continually treat workers "answers" to items in their job satisfaction questionnaires at face value, as reflecting whether workers are really happy or unhappy with their work. It is because of their inability to really come to grips with what their work means to people, that industrial psychologists remain puzzled at the apparent discrepancy between the fairly high degree of "job satisfaction" reported in most of their surveys and the fatalism and unhappiness with their jobs reported by sociologists of working-class culture in both the United States (Harrington, 1972) and Britain (Zweig, 1980).

Because this discrepancy is starting to lead to new and, in my view, much better ways of assessing how employees really feel about their jobs and because it shows up, in a dramatic

fashion, the inadequacies of the standard way industrial psychologists measure job satisfaction it is important to treat it in the detail it deserves.

In spite of recent critiques of the questionnaire method of assessing job satisfaction, the final arbiter of the state of American and European workers still seems to be percentages taken from large job satisfaction surveys. And their verdict is pretty clear: Whether these indices are the crude single item measures taken in Gallup or other national polls, or are the very sophisticated multiple item scales such as those already mentioned, the proportion of workers reporting satisfaction remains inexplicably high. The statistical fact is that, regardless of what degree of measurement sophistication is brought to bear, 80 per cent or more of those surveyed report being satisfied with their jobs. This is true whether the studies use data specific to workers in assembly plants or to national random samples. For instance, a 1954 national survey of half a million Americans by Science Research Associates (SRA) of Chicago reported 81 per cent of those polled were satisfied with their word. More recently the Gallup organization has reported 87 per cent satisfied in a 1964 poll, and 77 per cent satisfied in 1980. Very recent survey results, reported by the Survey Research Centre, reveal fully 91 per cent of male workers are satisfied with their jobs. These last results are as high as those reported in earlier surveys (which are summarized over the period 1958-1973 by Kaplan, 1976).

These different studies all clearly suggest that an overwhelming majority of American workers report satisfaction with their work. These results also show little change (only four percentage points) over the 20-year interval between the boom years 1954-1973. It seems that under the range of most normal circumstances job satisfaction (or the absence of dissatisfaction) ranges from a low of about 79 per cent to a high of 95 per cent. This trend is apparently not exclusively an American phenomenon, as Cherns (1980) points out in a discussion of recent job satisfaction research in Britain. There seems to be no necessary reason why figures of the same order should not be found in a country like South Africa as well.

At the same time that we find this overwhelming proportion of employees in all of these very different organizations reporting they are not dissatisfied with the work, we find indications that this reliable measure of job satisfaction is not as highly related to absenteeism, within those organizations, as we might expect. In the same studies, with grievances and turnover measures (where less data are available), the relationships with job satisfaction are not consistently high or low. If we look at differences among work groups

within these organizations the casual relationships between satisfaction and organizational behaviour are not very high (Taylor & Bowers, 1972). These findings may be explained on the basis that, regardless of how well we define work satisfaction and how many categories we separate and recombine it into, we are still measuring more than perceptions of the work itself. We cannot expect to measure all that is important to workers or to get beyond their internal defences or expectations with pre coded questionnaire measures alone.

Moreover, from quite a different source impressive evidence is coming in that documents the increase in the incidence of negative behaviour among workers in the United States and Europe, pointing to a decline in the work ethic that has reigned supreme for over a hundred years. For instance, reports such as *Work in America* (1973), the articles reprinted in *Man against work* (Zimpel, 1978) and *Work in Britain* (Zweig, 1980) have, over the past fifteen years, shown increased absenteeism and turnover, increased sabotage of product and plant, and a decreasing willingness to accept authority without question. In spite of a recessionary economy, and the pressures that such a situation places on employees to accept work as given, recent absenteeism rates (especially part-week rates) in both the United States (Work in America, 1973) and Britain (Zweig, 1980) show no change from the high levels of 1971 when worker discontent seemed at its peak. This is in revealing contrast to voluntary turnover figures for the same period which show a marked decline by 1975. Employees are staying with their jobs while the job market is tight, but they continue apparently to take off for long weekends as a way of improving the quality of their lives. Other signs of continued employee response include reports of college educated youth entering corporate positions in greater numbers, but increasingly unwilling to accept the corporate philosophy as given.

As argued earlier, the main reason for the significant discrepancy is that the measures of job satisfaction employed by industrial psychologists fail to reveal how employees really feel and think about their jobs. In order to establish what is actually going on, we need to get "behind" the superficial and easy answers that employees give to pre-coded satisfaction measures. As Terkel (1974) and Meissner (1976) have made clear, in order to do this we at least need to understand what employees *mean* by the terms *they* use to describe their jobs. This cannot be done by relying on data obtained by formal methods presented in a form of expression that is often alien to the workers themselves. We have to consider the difficulty of even finding words or terms in Africa which allows blacks to express what they think and feel about their job, to appreciate the validity of this point. As Davis (1971) has pointed out, information about values, concerns, fears and ambitions cannot be obtained at arm's length. It

is privileged information, and as such requires a collaborative and trusting relationship between the worker and the investigator. The danger is great of assuming at this point that pre-coded satisfaction measures can be modified into other more understandable or communicable versions, or otherwise smoothed to counter nearly any methodological objection. However attractive this strategy may seem, the variety and nature of the possible internal weaknesses of these measures are simply too great for them to be used in understanding what can be done to improve the quality of working life in a particular setting, or in communicating to others the state of worker response to that work life.

What follows from this analysis is that it is futile to try to develop better measures of job satisfaction from the same perspective as before. On the contrary, even if job satisfaction could be adequately defined, what is needed is not more of the same, but for some indicators of what would improve the quality of working life for given workers in given settings. In order to overcome the various methodological limitations described above, measurements should reveal the values of those being measured, should reinforce expectations regarding the ability to change, should provide a wide range of alternatives to present conditions, and should highlight dissonance between self and job to ensure a more human integration between them. To overcome the limitations (namely resistance and suspicion) to the use and application of those data for improving the quality of working life, questions must be communicable and believable to those involved. Employees and managers alike are cautious in their acceptance of survey results. In order to overcome this caution the product of research should be of interest to all of those involved in organizational change, and not only to other academics or to policy makers. Social survey data can, and should, be used for improving quality of working life rather than merely establishing its absence or presence. Such data can be obtained through measures created and administered by organizational members, to be used not only for creating improvements in the workplace, but for rewarding and reinforcing those changes once they are in place.

A possible way of overcoming the difficulties that we have highlighted is represented by the Survey Feedback approach developed by Mann (1957) and Bowers and Franklin (1972). This approach has the advantage of involving those who are measured by conventional surveys, in the process of analysing the results of those surveys and designing improvements based on those data. It is an authentic development of the action research ideas of Lewin (1946), and it has been used with considerable success for many years. The respondents are directly involved in making sense of the grouped summaries of their own

answers to questions in order to make improvements based on them. In spite of this respondent participation in analysis, certain limitations imposed by the structure of this method serve to make it inappropriate for our purposes as stated above. Because the survey questionnaire is developed in advance by the "experts" it is necessarily narrow in its sampling of items (e.g. employee needs or wants) used to reveal disparities in employee fulfilment. No hope can be held that a questionnaire can include all elements of importance to all employees, either over time or over organizations. Survey feedback, also limits the perspective (if not the opportunities) for alternative organizational structures to be considered. Finally the pre-coded survey used for analysis is also used for monitoring results of change. Since the survey measures usually be specific enough to a given situation to permit continued reward and support to those involved to do these results would need the continued translation or interpretation by group members, which cannot always be guaranteed. Unfortunately the reverse is not true and "negative" aspects in the uninterpreted, standardized results can continue to be used as punishment, or worse yet, proof of failure by those else where in the system. Despite these difficulties, Survey Feedback is an approach that is on the right lines, in terms of the arguments advanced in the present paper. It represents a move in the correct direction, away from total reliance on pre-coded job satisfaction scales and towards *involving* the persons being assessed in the measurement process itself.

A further step in this direction that has even greater potential for overcoming the difficulties in the usual way of assessing job satisfaction is represented by the Action Research model proposed by such researchers as Davis (1971), Thorsrud (1972) and Herbst and Getz (1977). It is the aim of this approach to break the vicious circle of the existing self-fulfilling hypotheses, currently exemplified by high levels of job satisfaction coupled with absenteeism and other signs of worker distress. Essential to Action Research is the joint designing of measures by both investigators and subjects and a much smaller emphasis on the sort of questionnaires relied upon almost exclusively by industrial psychologists in the past. As Herbst and Getz (1977) have so convincingly shown, participant involvement of this kind is not necessarily technically inferior to measurements carried out by psychometricians. Unfortunately systematic experience with this approach is still too sparse to allow firm judgements about it to be made. However it is the thesis of the present paper that these different sorts of approaches have to be tried in order to get industrial psychology out of its present impasse-one largely produced by relying too much on the wrong kind of measures of quality of working life.

ABSTRACT

This paper argues that the questionnaire measures of job satisfaction relied on for so long by industrial psychologists do not provide information that can help improve quality of working life. There is little agreement as to what is measured by such scales and the employees' responses to them reflect a variety of things besides satisfaction with their jobs. The problems with job satisfaction measures are highlighted by the fact that such measures have shown high and stable levels of job satisfaction at a time when signs of employee frustration and alienation have been increasing. It is argued that industrial psychologists need to develop quite different ways of assessing job satisfaction in which the subjects participate in the development of the measuring instruments themselves.

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