CURRENT TRENDS IN INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY

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This paper examines three current trends in industrial-organizational psychology; the continuing trend towards a more social orientation, a trend towards more theory development, and changes in graduate education.

During the past few years, there has been a growing concern about the future of industrial and organizational psychology. The winter 1971 issue of *Professional Psychology* published reports from a 1969 A.P.A. symposium, "The Changing Role of Industrial Psychology in University Education," while other papers by Bass (1970), Naylor (1971), Bray (1970, 1971), Wallace (1971), Hinrichs (1971), Schneider, Lawler and Carlson (1971) and Meyer (1972) have dealt with this issue. While such concern is not new (Munsterberg, 1913; Hearnshaw, 1942; Rodger, 1949), three recent developments do have important implications for industrial and organizational psychologists, particularly those who are influenced by American traditions in this discipline. The first is the continuing trend away from an individual differences perspective towards an increasingly social orientation; the second is a discernible movement towards more theory development; the third trend concerns changes in graduate education, particularly in the U.S.A. and to a lesser extent within the United Kingdom.

The Trend Toward a Social Orientation

The early decades of the field, dating from the pioneering systematic exposition of Munsterberg (1913), were the years of traditional industrial psychology with its cornerstone, the notion of individual differences providing the thematic link for the accepted content areas of the field; job analysis, interviewing, personnel testing, merit rating or performance appraisal, working conditions, fatigue, and training. Economic man was the guiding model and the important influences were derivatives from classical organizational theory as well as the then empirical psychology. So it remained until the Hawthorne Studies introduced a social perspective into industrial psychology, facilitated the development of neo-classical organization theory, and gave rise to the cult of Human Relations.

Over the next three decades this nascent social perspective matured, a development assisted by the rapid growth of social psychology (par-

ticularly Lewinian Group Dynamics), a favourable zeitgeist in much of the Western World and due to the direct influence of writers like Mayo (1933) Roethlisberger and Dickson (1943), Maier (1946), Viteles (1953), and Brown (1954).

By the mid-1960's, industrial psychology clearly exhibited the influences of the differential and social traditions, and had, to a considerable degree, divided into two fairly distinct branches. The individual differences industrial psychology (which may be referred to as *personnel psychology*) continued to focus on the traditional topic areas. The younger industrial social psychology (which was becoming labelled *organizational psychology or organizational behaviour*) covered topic areas such as organizational theories, individual and organizational conflict, attitude measurement, job satisfaction, motivation, morale, leadership, participation in decision-making, job enrichment, group dynamics and relationships, communication, organization effectiveness and organizational development and change.

There is some degree of communality in terms of methodology and empirical values shared by the two branches, but there are also considerable differences. Personnel psychology has become largely a technology; organizational psychology, at least normatively, is a science. Personnel psychology remains predominantly industrial in focus; organization psychology has a broader scope, and includes many non-industrial organizations within its research catchment. But the major difference is fundamental. Organization psychology now has a systems perspective (Schein, 1970)—it views the organization as a complex social system which must be studied as such if the behaviours of individuals within it are to be adequately analyzed and interpreted.

It is likely that the trend towards a social emphasis will continue even further, with the balance-point of the discipline moving from the present social-psychological position to a more sociological one, as interest focuses increasingly on the behaviour and performance of social groups, sub-systems and total organizations, rather than on the behaviour of the individual members. Some consequent and concomitant effects appear to follow from this creeping "socialism".

First, the area currently places less emphasis upon measurement than was the case traditionally. Second, current industrial psychological research appears less concerned with carefully developed instrumentation. The verbal item with the ubiquitious 5-category Likert response scale has replaced the standardized and well-researched psychometric test or rating scale as the conventional data generator. Third, industrial psychology has become more overtly value-laden, not only due to the social emphasis, but also to the accompanying inputs from humanistic psychology (Maslow, 1954; McGregor, 1960). One must, however, concede that the notion of a value-free industrial psychology has always been something of a fiction (Baritz, 1960) and it is likely that the associated non-scientific values have merely changed.

For Munsterberg (1913) industrial psychology was psychotechnics—a technology, strictly an applied psychology, i.e. there was a pure psychology generated by laboratory experimentation, some of which could be applied to various fields of everyday life. To remain viable, such an industrial psychology would need to retain close links with general psychology, even if the influence processes were largely but not exclusively uni-directional. Many years ago, Hearnshaw (1942) considered such a view to be a misconception, by suggesting that industrial psychology had its own unity—that it was a subscience of general psychology and not simply an applied psychology. In his view, industrial psychology could and should develop its own body of theory, independent of but complementary to the theories of general psychology.

Hearnshaw was suggesting an ideal state, and practice in the decades which have followed has fallen short of this ideal. Applications of general psychology can be seen e.g. in the use of learning theory in industrial training. Attempts have been made to generate theory, particularly in the area of worker motivation (Campbell, Dunnette, Lawler and Weick, 1970). But a lot of industrial psychology, in fact, does not fall stricty into either category. Much industrial psychology research is typified by what Lachenmeyer (1970) has called nomological experiments — studies used to verify isolated hypotheses which are not deduced from some general psychological or limited range theory. American organizational psychologists, particularly, are concerned about the atheoretical nature of the subject (Hinrichs, 1971).

The atheoretical nature of much of the area might not have been a weakness if industrial psychology had been closely tied to pure psychology. In fact, the relationship of industrial psychology with pure psychology far from being symbiotic, has been almost exclusively parasitic: it has drawn from other areas of psychology, but has contributed little by way of data, techniques or theory (Lawler, 1971).

To date, the trend to theory, while not strongly pronounced, represents at least an attempt to remedy the unsystematic state of many topic fields in industrial psychology, some of which represent little by way of advance over the conventional wisdom. Hopefully, developments such as social comparison and expectancy theories in work motivation (Vroom, 1964; Adams, 1965; Campbell, Dunnette, Lawler and Weick, 1970), leadership theories (Likert, 1967; Fiedler, 1967), organization theory (Woodward, 1965; Katz and Kahn, 1966), and models of managerial behaviour (Porter and Lawler, 1968) are examples of the approach to research which will emerge.

Given the trend to more social content, one can envisage that links are more likely to emerge with theory in social psychology and sociology than with those in general psychology. But in any event, a stronger body of theory is a necessary condition for industrial psychology to survive,

otherwise the area will descend to a very degenerate and arid technology which retains only vestigial, largely historical links with its parent discipline.

Trends in Graduate Education

In the United Kingdom, the education of professional and academic industrial psychologists continues to be specialized. Two-year Masters' courses are common and these may be taken by psychological graduates and in some cases by non-psychologists. The bulk of the course work is in fields directly related to industrial psychology, although in some cases an attempt is made to give some basic general and social psychology to non-psychologists as part of the Master's course.

In the U.S.A. the terminal degree for professional or academic industrial psychologists is more likely to be a Ph.D. with course work either in a psychology department or in a business school. Two very distinct types of graduate emerge. The industrial psychology courses in psychology departments have changed recently. A decade ago the course work for the post-graduate industrial psychology student would have been almost completely industrial. The industrial psychology major now covers some applied courses, but he is also expected to cover theoretical psychology, quantitative methods and research methods, and to select from courses in general areas such as cognition, perception, mathematical psychology, social and personality. Thus, the aim is to produce a scientist who has specialized to some extent in one area rather than a generalist in his own area, but one who lacks graduate teaching in any area of basic psychology.

Business schools recruit mainly from physical science and engineering graduates who embark on a two-year M.B.A. degree and who may go on to D.B.A. or Ph.D. One of the areas of specialization in the business school is organizational behaviour, where students are given an introduction to some sociology and psychology (which is heavily biased toward social psychology) and a broad coverage of organizational psychology with very little of the traditional personnel psychology. This means that the background in general psychology of the business school D.B.A. or Ph.D. specialist behaviourist is often limited (Campbell, 1971).

At the same time what might be called a locus change continues. Cranny (1971) showed that in the previous decade in the U.S.A. the number of industrial psychology programmes in business schools had increased, while the absolute and proportionate number in psychology departments had decreased. Approximately one-third of the graduate psychology departments offered industrial programmes in 1960. By 1970 this had dropped to one fifth. As Campbell (1971) states, "It seems evident that schools of business hire more teachers of industrial and organizational psychology, teach more courses in these areas, and prob-

ably turn out more Ph.D's interested in the psychology of behaviour in organizations than do psychology departments."

In the United Kingdom the locus does not appear to have shifted to quite the same extent from psychology departments. Only two business schools are currently operating on the typical American pattern—those at Manchester and London. However, non-psychology graduates are now entering university psychology departments in the United Kingdom to specialize in industrial psychology, yet lacking a background in basic psychology.

As a result of these trends in graduate education, two styles of industrial psychological research seem likely to emerge. That coming from psychology departments may well be conservative, biased toward experimentation, at times apparenty trivial in emphasis, social-psychological in perspective, and employing increasingly sophisticated quantification. The research from business school behaviourists will be more molar, concerned with broader research questions, increasingly sociological, and, at times, methodologically less rigorous. Paradoxically, in value terms, psychology departments may well produce the cynical scientists, while the business schools (supposedly centres of hard-headed pragmatism) could yield successive crops of rather romantic humanists.

The latter style may well prevail because of numbers alone, but also because it will be more widely read and heard—an industrial psychological Gresham's Law could well develop. Management writers may prefer the more immediately readable, and more apparently relevant business school approach. Recruitment patterns, i.e. filling business school positions from business school Ph.D's, could well exacerbate the problem. It could hasten what Naylor (1971) has pessimistically called the Postulate of Diminishing Excellence, i.e. that any applied field risks deteriorating to some limiting state of mediocrity.

As a general consequence, industrial/organizational psychology faces a very real "take-over" crisis. Its content could well become increasingly divorced from general psychology. Psychologists in business schools will change their patterns of interaction (Vroom, 1971), and as a result, they are less likely to keep abreast of developments in basic areas of psychology and so their own work will be largely insulated from this desirable influence. Furthermore, there is a danger of research becoming methodologically simplistic, even naive, in relying upon techniques more appropriate to classroom demonstrations than to serious research, and becoming characterized by premature and inappropriate attemps to apply social psychological insights. In summary, while the field may be superficially attractive, it risks becoming simplistic and gimmicky. Unfortunately, a simplistic behavioural approach has a very seductive appeal for many managers who lack a background in the social sciences.

The Outcome

The outcome, following the interaction of the three major trends discussed above, is difficult to predict with any certainty, but some possibilities suggest themselves. Personnel psychology as a sub-field of scientific inquiry is almost moribund, and the three major trends discussed seem to argue against any revival. The traditional content of this field will be taught largely as a technology in business studies courses with theoretical aspects restricted to undergraduate psychology courses in testing, scaling theory, and psychometrics. Organizational psychology appears to be a more viable, but ulimately a fissiparous organism, with business school organizational behaviour moving closer to and even eventually being absorbed by the sociology of organizations, while the organizational psychology resident in psychology departments becomes a sub-field of social psychology.

Industrial Psychology in New Zealand

Industrial psychology in this country has always reflected overseas patterns, from the early English influences dating from Shelley's activities at Canterbury in the 1920's, and the Industrial Psychology Division of the D.S.I.R. during the 1940's, to the more contemporary American influences. There has been an increase in research activity in New Zealand in the last five years, most notably the work of Hines at Victoria University of Wellington. A recent summary of occupational psychology research prepared by the Occupational Division of the N.Z.Ps.S. listed 40 published references, 20 unpublished and 14 examples of research in progress. The majority of these involve survey-style research rather than experimental studies, and admittedly not all studies were or are being undertaken by psychologists. However, with the number of academic industrial and organizational psychologists increasing, together with the rising number of New Zealand and overseas graduates working as professionals in this country, one can possibly look forward to the development of a field which may be more responsive to indigenous problems.

It is unlikely that the development of industrial and organizational psychology in New Zealand will proceed independently, or fail to reflect the overseas trends discussed earlier. Thus, of the 74 studies in the N.Z.Ps.S. list mentioned previously, only one is clearly in the differential tradition, seven appear to be applied-experimental, while over 60 appear to reflect a social orientation. Indigenous problems are obviously of social origin; a factor which will further emphasize the social bias of research. As a result, we can expect increased interaction between psychologists and sociologists who are undertaking organizational research in New Zealand. Clearly then in the near future the prevailing orientation will be a social one. Probably industrial and organizational psychology will continue to be taught in both psychology

and business administration departments in New Zealand, and we are more likely to follow the Engish pattern of development in that respect. Previous recruitment patterns suggest that psychologists will be well represented in the New Zealand business school behavioural positions. As a result, the input from the major discipline is likely to remain at a healthy level, particularly if the Occupational Division of the N.Z.Ps.S. can become an active professional focal point for the academics and non-academics working in this area. Nevertheless, it is obvious that the situation in New Zealand will have little impact on the fate of industrial and organizational psychology. This will very largely be determined by events elsewhere.

Conclusion

In the discussion of these current trends, three qualifications need to be noted. The first is an acknowledgement of an Anglo-American bias in this paper. While in many countries indigenous industrial psychologies began by way of an individual differences tradition in answer to local problems (McCollom, 1968; Ord, 1972), increasingly the international pattern appears to be a reflection of North American trends.

Much of the discussion is not relevant to applied experimental psychology. This field is closer in content to mainstream psychology, and, although it currently faces very real problems of its own (Adams, 1972), its future seems less threatened than that of the general applied field from which it developed.

Finally, the main concern in this paper has been with industrial psychology as an academic discipline rather than as professional practice. If the latter is derivative from the former, then much of this discussion will be relevant. Hearnshaw (1949) saw professional industrial psychology as firmly rooted in academic industrial psychology. This writer agrees with McCollom (1968) and Rodger (1949) in that what is often called professional industrial psychology has miscellaneous origins, and is basically opportunistic. It draws upon many fields, and in specific practices sometimes amounts to little more than an intelligent mixture of common sense and sensible personnel practice. There is no recognized profession of industrial psychologists as there is in the cases of educational or clinical psychology. So, apart from the would-be academic, or psychologist in the Ministry of Defence, or in a consulting firm, the major in industrial psychology leaves university to take up a position which seldom has the label "psychologist" included and which invariably has a very large "non-psychology" component. Because of this he is often competing for employment with, and soon interacting with, many non-psychologists. One result is a common loss of identification with psychologists as a reference group, and psychology as a discipline.

This paper has examined three significant trends in the field of industrial-organizational psychology. The continuing trend towards a

social emphasis may create slight feelings of anguish or nostalgia among some psychologists raised in a differential tradition. The trend towards more middle-range theory will be welcome to most; but the trends in graduate education raises problems of sufficient consequence to alarm psychologists who are interested in the long-term viability of the field.

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