

# Fifty Years of Things, Data, People: Whither Job Analysis?

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The development of a scientific discipline requires the formulation of a language that consistently expresses its theories, purposes, procedures, and elemental units. I believe this is fundamental. The pursuit of research in the discipline usually involves a continuous refinement and stabilization of this language (definitions of concepts and relationships among elements) to achieve validity in practice. This is how a body of knowledge is accumulated and passed on.

These self-evident thoughts come to mind in connection with a symposium I helped to organize and present for the recent 2004 SIOP conference in Chicago. The symposium was entitled Fifty Years of a Seminal Theory: Things, Data, People. Along with my presentation were those of **R. J. Harvey** and **Steven Cronshaw**. They were discussed by **Ed Fleishman**, **Milt Hakel**, and **Miguel Quinones**. The heart of the symposium was the job analysis language created by the Things, Data and People (TDP) theory and its derivative Functional Job Analysis (FJA) 50 years ago (Fine, 1955, Fine & Cronshaw, 1999). The presentations, discussions, and handouts included some historical background, factor analyses, and recommendations for further research.

I believe it is well understood in I-O psychology that job analysis is a fundamental undertaking. Job analysis provides the basic information for such I-O human resource management practices as selection, performance evaluation, job evaluation, job design, and the procedures for achieving job satisfaction (Ash, 1988). Such a variety of practices require that practitioners and researchers agree about basic concepts such as tasks, functions, skills, knowledge, and abilities to stabilize the language of job analysis.

TDP/FJA research and development began in the early 1950s and was incorporated in the third and fourth editions of the DOT (1965 and 1977) as well as correlative counseling tools also published by the Department of Labor (1979). It was also incorporated in the Canadian Classification of Occupations (1971). For 35 years, I provided training and consultation all over the U.S., Canada, several countries in Europe, China, and India. Wherever FJA/TDP was introduced, it found favor precisely because FJA/TDP provided a language and stable concepts to work with. It was found useful as a basic source of employment information not only in the daily operations of the United States Employment Service but in other disciplines such as economics and sociology (Kohn & Schooler, 1983). However, its ability to serve as a basic foundation on which to build did not appear to find favor with the experts brought together in the '90s to bring the DOT up to date. In their wisdom these people felt it was time to "discard the baggage associated with the

old DOT name and also help people envision the forward thinking and high-tech nature of the O\*NET project.” (p.18, Dye & Silver, 1999; Peterson, Mumford, Borman, Jeanneret, & Fleishman, 1999). Instead of building on 40 years of achievement and broad acceptance of work that had been done and was in wide use, the baby got thrown out with the bathwater.

The irony of this action is that the factor analysis of the “forward thinking” in the O\*NET document came up with TDP as the underlying factors in the world of jobs (although expressed in somewhat different terms; p.121, Jeanneret, Borman, Kubisiak, & Hanson, 1999). In addition, the same report describes General Work Activities (GWAs), particulars within the TDP framework, which are worded almost identically to the functional skills described by FJA (p.122 ff). Thus, although current and past research indicates that TDP/FJA was on the right track toward the goal of achieving a stable language for job analysis, the O\*NET experts spun their wheels 40 years later to discover the same concepts without even acknowledging their roots.

Attendance at the symposium more or less mirrored the current state of affairs. The small audience consisted mostly of mature individuals—including persons from the USES, Social Security, and the Netherlands—all decrying the loss of the DOT and by inference the TDP/FJA language that they had integrated in their operations and research. Also noted was a distinct absence of young I-O psychologists despite a convention with close to a majority of attendees under 35 years of age. (Admittedly, there must have been 20 different symposia going on at the same time). This was particularly sad because, as Cronshaw pointed out, TDP/FJA is especially useful in teaching inexperienced and unsophisticated young people about the world of work. TDP/FJA is helpful because it is embedded in a systems approach that explicates the significant relationships between Work, Worker, and Work Organization. In this frame of reference, TDP/FJA is the language of work (functions expressing what workers do) linked to the language of the worker (qualifications, what workers have) that in turn is linked to the language of the work organization (objectives, work that gets done).

On the supposition that perhaps many young I-O psychologists would be interested in learning more about the hinges, TDP job analysis theory, Cronshaw and I would be willing to share our knowledge and understanding. For details, please contact us at [sidfine@aol.com](mailto:sidfine@aol.com) and [cronshaw@psy.uoguelph.ca](mailto:cronshaw@psy.uoguelph.ca).

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