NOTES TO ACCOMPANY THE EXAMPLE DATASET

Background

This dataset was used in the following publication, and a description of the theoretical background, the methodology, and the findings and their interpretation can be found here:

> Jackson, P. R. and Mullarkey, S. (2000). Quick-response manufacturing: Lean production teams in garment manufacture. *Journal of Occupational Health Psychology*, 5, 231-245.

The study is part of a programme of research into organisations' strategic choices, how they are expressed in work designs and the impact of those work designs on employee psychological health.

The data were collected from four production sites of a large UK-based garment manufacturer which used tow forms of work design: one based on principles of lean production teams and the other a traditional form of work design called the progressive bundle system. In the team-based system, employees worked to produce complete garments within small teams of 12-14 people. In the progressive bundle system, employees worked individually at work stations where they performed only a single operation (such as sewing a seam or a buttonhole). The basic research question was what differences there were between these forms of work design.

Sampling and data collection

The two authors negotiated with senior management of the company to allow them to administer a survey questionnaire to staff during normal working hours. A number of sessions were scheduled during the working day when production could be halted in order to allow workers to move to the staff canteen where they completed the questionnaire under the supervision of one of the researchers. Each respondent was given an envelope so that they could seal up the questionnaire once they had completed it; and the researchers took all questionnaires off-site so that no member of the organisation could see the completed questionnaires.

After entering the data into the computer and detailed statistical analysis, a feedback report of the overall findings was presented face-to-face to both workers and management of the company. The report was written in such a way that no individual could be identified. Issues raised by the survey were then picked up by the organisation for action.

Measurement of key variables

The same basic principle was followed for all of the key constructs which were the focus of this study. Each construct was measured by a set of items (usually 3-5), which were then averaged together to get a composite score for the construct. Initial analyses were performed to assess the reliability of the combined score, and coefficient alpha indices of reliability are reported in the paper.

The dataset gives the composite scores for the variables included in the journal paper, together with some demographic variables. The value labels in the SPPS file are those for the individual items, so that users can see more clearly how to interpret a specific numerical value.

Variables

The data file consists of 21 variables for each of 556 cases.

Control (six scales) Individual task control was assessed through two variables. *Individual timing control* was measured by 4 items assessing the extent to which individuals could control timing aspects of their work. *Individual method control* was measured by 6 items assessing the extent of control over methods aspects of work. *Collective timing and method control* was measured by adapting the individual measures to the group level. *Role breadth* refers to how many tasks outside the job itself that a worker undertook (a count of tasks from zero to six); and *task variety* was measured by 3 items assessing how repetitive the job was.

Work demands (five scales) *Problem-solving demands* were measured by 5 items covering the extent to which the job draws upon individuals' problem-solving abilities. *Skill utilisation* was measured by 4 items assessing how much opportunity there was to use worker's own skills. *Monitoring demands* were measured by 4 items assessing the extent of demands on the cognitive resources of the worker. *Production pressure* was measured by 3 items to asses work intensification. Finally, *production responsibility* was measured by a 5 item scale assessing how expensive the consequences were of lapses or errors on the part of workers.

Social climate (four scales) *Social contact* is a measure of quantitative aspects of the social workplace, and assesses how many people someone works with in order to get their job done. *Group cohesiveness* was assessed by 3 items indicating how well people felt that they worked together. *Coworker trust* was measured by 7 items assessing how much people felt they could rely on others in their group. *Social support* from colleagues was assessed by 5 items.

Psychological wellbeing (two scales) *Job-related strain* was assessed by 12 items assessing feelings of anxiety and depression within the job; and *job satisfaction* was measured by 16 items each of which related to a specific aspect of the job.