

A Study of Occupational Analysis Practitioners

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Introduction

The Network of Occupational Analysts (NOA) of Australia created and distributed a job inventory for CODAP Practitioners - people involved in Occupational Analysis (OA) projects using the Comprehensive Occupational Data Analysis Programs (CODAP) software and methodology. Responses were solicited from practitioners worldwide during the summer of 1991. In the space available, this paper provides only the broadest of overviews of the results of this study. Copies of the complete report are available from the Institute for Job and Occupational Analysis (IJOA) at 926 Toepperwein Road, Converse TX, 78109.

The Survey Instrument

The survey instrument, dated May 1991, contained a Background Section and seven major lists. The Background Section solicited name, business telephone number, business address, type of employer (commerce, military, education, etc.), employer class (military or civilian), country of employment (Australia, Canada, or US), job interest, use of abilities, use of training, organization use of: language translations, Braille, confidentiality agreements, security regulations; percent of data automation which is keypunch/keydisk or optical scanner or reader; percent of projects that involve: employer associations, managers in commercial firms, military organizations, non-military government departments, and unions.

The major lists included a "check all that apply" instruction for items under the following topics: "In what areas do you think more CODAP research is needed?"; "In what areas would you like procedural guides to be developed or improved?"; "In what application areas have you been involved with during the past three years?"; "In what industries or sectors have you been doing occupational analysis work during the last three years?"; "How did you learn to do CODAP work?"; "What tasks do you perform in your current job? (then rate relative time on 9-point scale)"; and finally, "What knowledge items do you use in your current job?". The "Areas of Research" list had twenty items and ranged from "Abilities Inventories" to "Veracity of Survey Responses". The "Procedural Guides" list had seven items and ranged from "Inventory Development" to "Survey Analysis". The "Application Areas of OA" list had 39 items and ranged from "Affirmative Action" to "Working Conditions". The "How I Learned CODAP" list had five items ranging from "Accredited university or college course" to "Self-instruction" (+ "Other"). The task list had 113 tasks organized under 12 Duty Areas. The "Knowledge" list had 80 items ranging from "Analysis of Variance" to "Worker Characteristics".

The Current Data Base

Data was received and automated from 90 CODAP practitioners. With one exception, survey booklets from identifiable agencies were assigned consecutive Case Control Numbers (CCN). To demonstrate the diversity and representativeness of the sample, consider the following breakdown by booklet numbers. Booklets from Australia are Case Control Numbers 0001 through 0027 (and 0090); booklets from Canada are numbered 0028-0036; booklets from the United States Coast Guard are numbered 0037-0040; booklets from the United States Navy are numbered 0041-0050; booklets from the USAF Occupational Measurement Squadron are numbered 0051-0081; booklets from the USAF Human Resources Directorate are numbered 0082-0085; and booklets from U.S. contractors are numbered 0085-0089. It is hoped that in the future other agencies may wish to complete this survey. With the atCODAP system used in this project, new data can be easily compared to and integrated into this data base.

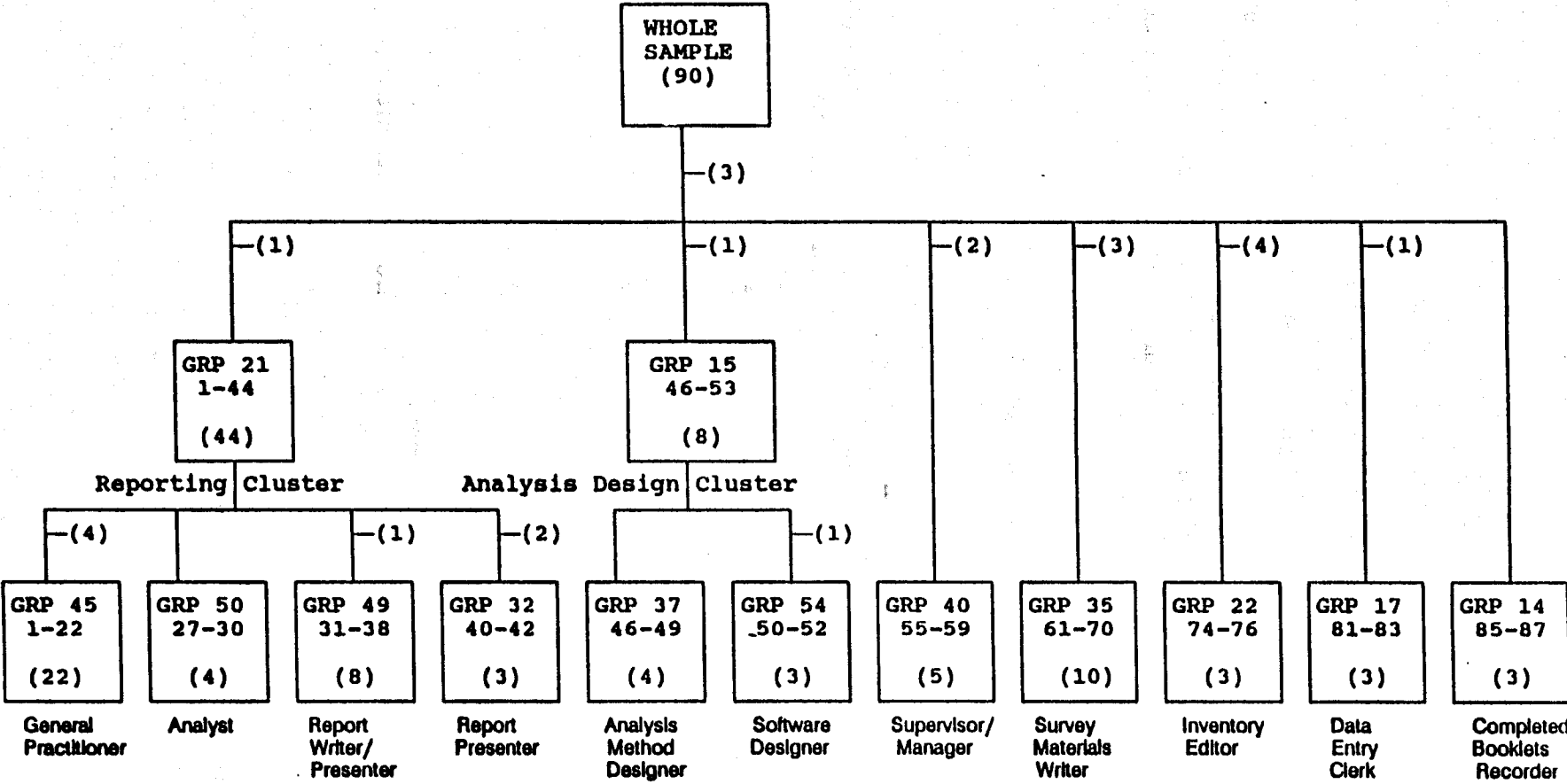
The Job-Typing Results

The Diagram shows eleven job-types as shown:

----- Reporting Cluster (Grp 21)	General Practitioner (Grp 45) Analyst (Grp 50) Report Writer/Presenter (Grp 49) Report Presenter (Grp 32)
----- Analysis Design Cluster (Grp 15)	Analysis Method Designer (Grp 37) Software Designer (Grp 54)
----- Independent Job Types	Supervisor/Manager (Grp 40) Survey Materials Writer (Grp 35) Inventory Editor (Grp 22) Data Entry Clerk (Grp 17) Booklets Recorder (Grp 14)

The following page (Page 3) shows the job-type diagram for identified groups. Pages 4 & 5 show the Task Co-performance modules which were derived from this data set using standard procedures. Because this inventory was well designed, had a small number of respondents (n=90), a small number of tasks (n=113) and a diversity of jobs covered (data entry through executive), the experimental enhancements for task clustering did not noticeably improve upon the clusters found using existing methods. Those enhancements will be discussed in future papers on data sets requiring improved resolution.

CODAP PRACTITIONERS



TASK CO-PERFORMANCE MODULES

CODAP PRACTITIONERS

MODULE NO.	MODULE TITLE	TASK STATEMENTS
1	Software Development-A	Calculate expected outcomes by hand Confer with analyst on requested new software Determine adequacy of existing software for proposed applications Develop specifications for new programs Decide whether to modify existing software or develop new software
2	Software Development-B	Establish prototype control cards or control specifications to exercise program options Identify file types required to accomplish objectives Test entire program for functions Test modules for functions
3	Project Management-A	Define objectives of project Advise managers on occupational analysis procedures Estimate project costs Monitor project costs
4	Project Management-B	Draft work program or schedule Gather information about client's requirements Estimate Computing Requirements Estimate key-punching or scanning requirements
5	Project Management-C	Define communication line or protocols Chair project meeting Convene project meeting Assign priorities or tasks Explain objectives, policy or practices Set standards or performance objectives
6	Project Management-D	Maintain staff roster Supervise survey data analysts Supervise inventory developers Supervise survey administrators
7	Project Management-E	Define ownership of survey information Evaluate bidder's proposals Monitor technical performance of contract Draft contract

MODULE NO.	MODULE TITLE	TASK STATEMENTS
8	Survey Materials -Preparation	Identify sample of persons for interviews Conduct face-to-face interview with subject specialist Write Background Information Section Develop preliminary inventory from source materials Write supplementary list (knowledge, tools, machines) Write survey instructions Conduct face-to-face interview with job incumbents Identify functional areas Organise schedule of interviews Translate interview notes into task statements Write up notes after interview
9	Survey Materials -Editing	Arrange task statements or other items into lists Edit Background Information Section Edit task inventory Edit supplementary list (knowledge, tools, machines)
10	Report Writing & Presenting	Assign titles to job-type groups Identify job-types Select groups of incumbents for which job descriptions are required Interpret task factor data Write occupational analysis report Specify control values for computer runs Write work request for computer analyst Edit report to agreed reading level Correct errors or anomalies in report Answer clients questions about report Explain interpretation of computer printouts Prepare oral presentation Present oral report Rehearse oral presentation
11	Field Surveying-A	Explain field survey procedures Prepare oral briefing for survey respondents Supervise booklet completion by expert panellists Supervise booklet completion by job incumbents
12	Field Surveying-B	Check accuracy of completed booklets Collate materials for mailing out Maintain records of returned survey materials Record survey responses by hand
13	Survey Materials -Formatting and Data Entry	Prepare artwork or layout of survey materials Enter survey responses into work processor or computer Implement data entry checking systems and procedures Type inventories or instructions