

The Many Benefits of Functional Job Task Analysis

Anna Isnard

Occupational Therapist

Introduction

Functional job task analyses are useful tools that when utilised can provide many benefits for individual employees as well as an entire workforce. Task analysis is performed for a wide range of positions in heavy industry, including mining and metallurgic refineries in Queensland with the following benefits observed:

- Understanding the physical requirements of each task and the inherent physical demands of a position can assist with accurate pre-employment testing when recruiting new employees,
- Provides the context or details of the environment the worker works in
- Identifying and minimising the manual tasks risks involved in a task and thus increasing compliance with safety practices
- and streamlining rehabilitation and return to work by giving health professionals useful information such as specific suitable duties available

Historically job task analysis was primarily use as a tool in human resources to assist with job profiling focusing on the skill requirements.

In occupational rehabilitation, functional job task analysis is a relatively new tool used to assist with the justification of results found in functional capacity evaluations of workers, who historically were assessed without having their physical ability matched to the demands of a specific job.

There is a noticeable lack of recent literature regarding functional job task analysis, especially in regards to its uses in occupational rehabilitation and occupational therapy. As identified in the 1997 article Job Analysis in Occupational therapy: Stepping into the Complex World of Business and Industry by Rosemary Lysaght; there is minimal guidance provided in occupational therapy literature with regard to job analysis; despite the wide variety of ways it may be applied within the scope of the profession. The lack of guidance including a theoretical framework, standardised process and documentation creates some difficulty for new therapists who perform functional job task analysis without a solid grounding in the industry.

Occupational Therapists Performing Job Task Analyses

Over the past two years I have performed functional job task analyses for a variety of companies in mining, manufacturing and metallurgic refineries and have experienced first-hand the many benefits these assessments create as well as some of the barriers yet to be overcome by therapists providing this work.

Occupational Therapists are unique in that they hold all of the skills and theoretical knowledge to perform functional job task analysis regardless of their experience within the occupational rehabilitation industry. During their training Occupational Therapists are taught to think critically, identify gaps in knowledge and processes and break down the simplest of tasks to analyse the basic processes behind physical movement and our interaction within our environment whether it be opening a valve to operating a control room. Occupational Therapists are trained to think holistically incorporating all aspects of the person, environment and organisation that contributes to a job role.

One particular theoretical model that fits well within the scope of functional job task analysis is the Occupational Performance Model Australia or OPMA which was created by two Australian Occupational Therapists and is conceptualised around six constructs including a person's occupational roles, the occupational performance areas within those roles, the occupational performance components within those areas, how these affect and are affected by a person's body, mind and spirit and finally how all of these areas can be affected by the external environment.

Assessment Tool

First and foremost a standardised assessment tool needed to be created that could be utilised by a wide range of industries, incorporating all possible physical movements, frequencies in which both specific movements and tasks were performed, and organisational and environmental demands required of the role. The assessment tool also provided information regarding particular physical and medical conditions which would not be suited to the job, asking workers to identify potential suitable duties available within the job role or work area.

How to collect data for Functional Job Task Analyses

During my interviews and observations with workers I found it useful to provide a blank copy of the assessment tool to assist workers' understanding of the categorisation of postures and positions and identifying the frequency at which they were performed. Also having an impromptu discussion with workers' after observing their job tasks allowed me to ask questions specific to the tasks observed and provide example explanations to allow workers to provide me with detailed explanations of tasks unable to be observed at the time.

Two important inclusions in functional job task analyses include the use of pictures to highlight common postures required by workers to complete job tasks as well as particularly awkward postures; and the inclusion of weight and force requirements for manually handling tools and equipment required by the position.

Pictures provide an important visual aid to assist other health professionals and management when considering a person for a particular job role, identifying physical restrictions and developing suitable duties and return to work plans. Many health professionals in particular are unfamiliar with the physical requirements of jobs and rely largely on explanations from workers and written explanations provided in job descriptions when comparing a persons' physical ability to a particular job role. Pictures also assist management and health professionals when considering a worker for redeployment within the organisation as they are unable to return to their pre-injury role.

Measuring the weight of tools and equipment essential to the job role and the forces required to manipulate these tools can assist when assessing a worker for a particular role or returning an injured worker to their pre-injury role. Actual measurement of weights and forces by an assessor can eliminate any bias or misperception by workers providing weights based on an item's "feel". Identifying weights and forces is useful for eliminating specific tasks that should not be performed when compiling a suitable duties program for a worker. Having these weights detailed can increase the efficiency and effectiveness of the suitable duties program and eliminate the need to have the worker or task re-assessed.

However, despite the many benefits of functional job task analyses, it is important to take steps to allow the therapist to be thorough and effective when performing these within the workplace. My initial experience performing job task analyses included being sent out to "shadow" a worker or team for a day while they went about their usual job tasks and asking questions during break times to clarify task requirements and request observation of particular tasks or measurement of weights and forces. Other organisations requested a discussion to explain the demands of a job and then an escorted tour of the workplace to observe particular tasks.

In my experience a combination of these modes of assessment was useful to ensure all information was gathered, however it was also important to work within the organisations requirements. For an inexperienced Occupational Therapist, the observation of work tasks before discussing them would be the best way to gain insight and experience regarding job task analysis. I found as I became more experienced performing job task analysis and gained an understanding of how the particular organisation and industry worked, I was able to ask more relevant and specific questions and could, at times, identify what information was missing. This ability was useful particularly when taking prior knowledge of a similar position at

another workplace and observing how this position was performed within the current workplace.

While performing Functional Job Task Analyses I was frequently asked what I was doing and whether I was “checking up” on the workers I was observing as quite commonly I was sent in to a work area with little to no explanation of what I was doing there. These experiences highlighted the need to develop an appropriate and thorough explanation to give to each new set of workers I observed which focused on the fact that they are the experts in their job and I was there to gather information on the physical requirements it takes to perform their job. I also explained that the finished reports would assist the rehabilitation coordinator and health professionals if they themselves became injured and suitable duties had to be identified.

Job Task Analysis Follow up

During these discussions workers’ would usually identify ways in which they thought manual tasks required by their role could be improved and I was able to provide education regarding particular manual handling, safety and health risks and prevention thus increasing their compliance with changes implemented based on the job task analysis findings. These discussions also highlighted the lack of training or information given to workers regarding particular manual tasks or safety practices and allowed me to take this information and feed it back to management.

Other Factors to Consider

While Functional Job Task Analyses have many benefits for both companies and their workers, they require regular updates to ensure the reports accurately reflect the current demands of a job role. Due to changes in an organisation including the combination or outsourcing of positions or the restructure of an organisation it is important that functional job task analysis is considered for these new positions. It is recommended that the job task analyses for a workplace are updated every 2-3 years or in alignment with any changes in the workplace.

A very common situation is when a mining operation changes or expands from underground to open cut or vice versa. These are times when job numbers can be expanded or cut back and combined depending on the requirements of the operation. With such large scale decisions and organisational changes occurring there is the potential for the physical requirements of a position to become bottom priority although the health and safety risks for inaccurate pre-employment screening can significantly affect these operations.

Finally to ensure the cooperation of workers and to enhance the accuracy of functional job task analysis within an organisation, it is important that the occurrence

of the job task analysis is communicated with workers prior to its commencement. A simple email or poster in the crib room can keep workers informed and assist them to feel more comfortable with the fact they will be observed while working and that it is not due to any performance issues.

There are many benefits of having functional job task analyses performed in any workplace regardless of the industry, however it is important to consider how these are performed, by whom and what aspects will be assessed to ensure thorough reporting and an accurate representation of the job.

References

Lysaght, R. (1997). Job analysis in occupational therapy: stepping into the complex world of business and industry. *The American Journal of Occupational Therapy*, 51(7) 569 – 575.

Cronshaw, S.F., Best, R., Zugec, L., Warner, M. A., Hysong, S.J., & Pugh, J. A. (2007). *A five component validation model for functional job analysis as used in job redesign*. *Ergometrika*, 4, 12-31.

Moore, F. I. (1999). Guidelines for task analysis and job design. World Health Organisation.

Chapparo, C., & Ranka, J. (1997). *The Occupational Performance Model (Australia) Monograph 1*. Author: Occupational Performance Network [ISBN: 0909353956] (out of print)

OPMA [Image]. (2012). Retrieved from <http://www.occupationalperformance.com>